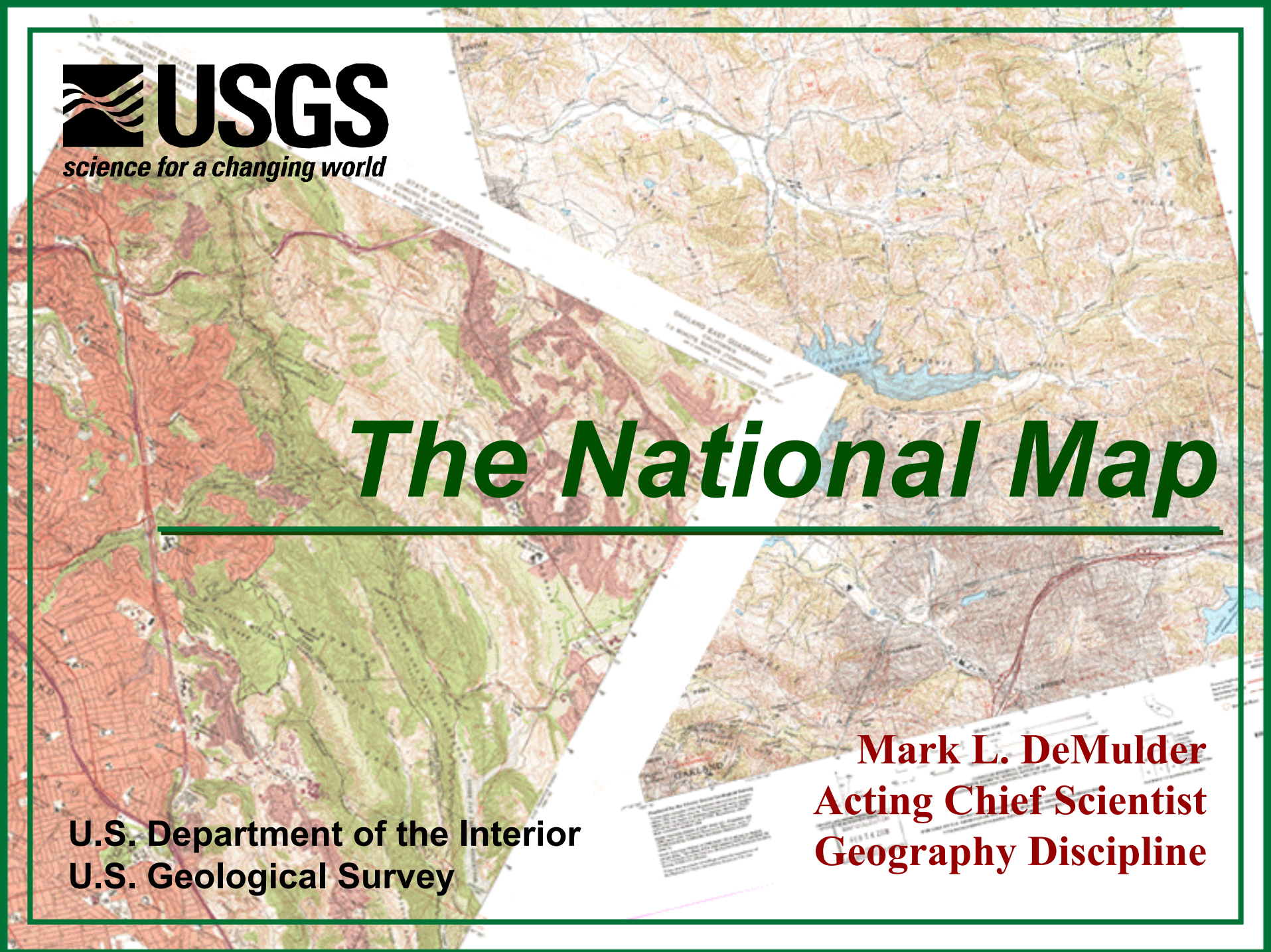
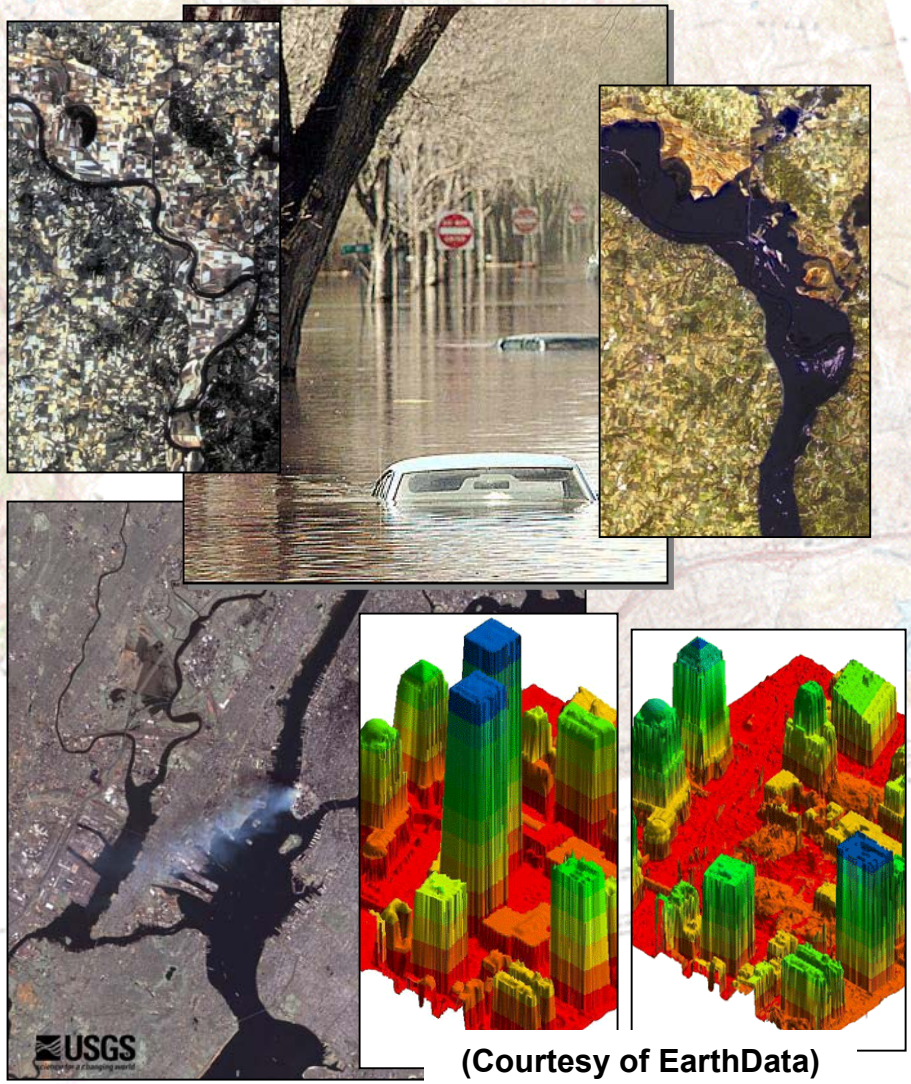

USGS
science for a changing world
The National Map
Mark L. DeMulder
Acting Chief Scientist
Geography Discipline
U.S. Department of the Interior
U.S. Geological Survey

Lessons Being (Re)Learned

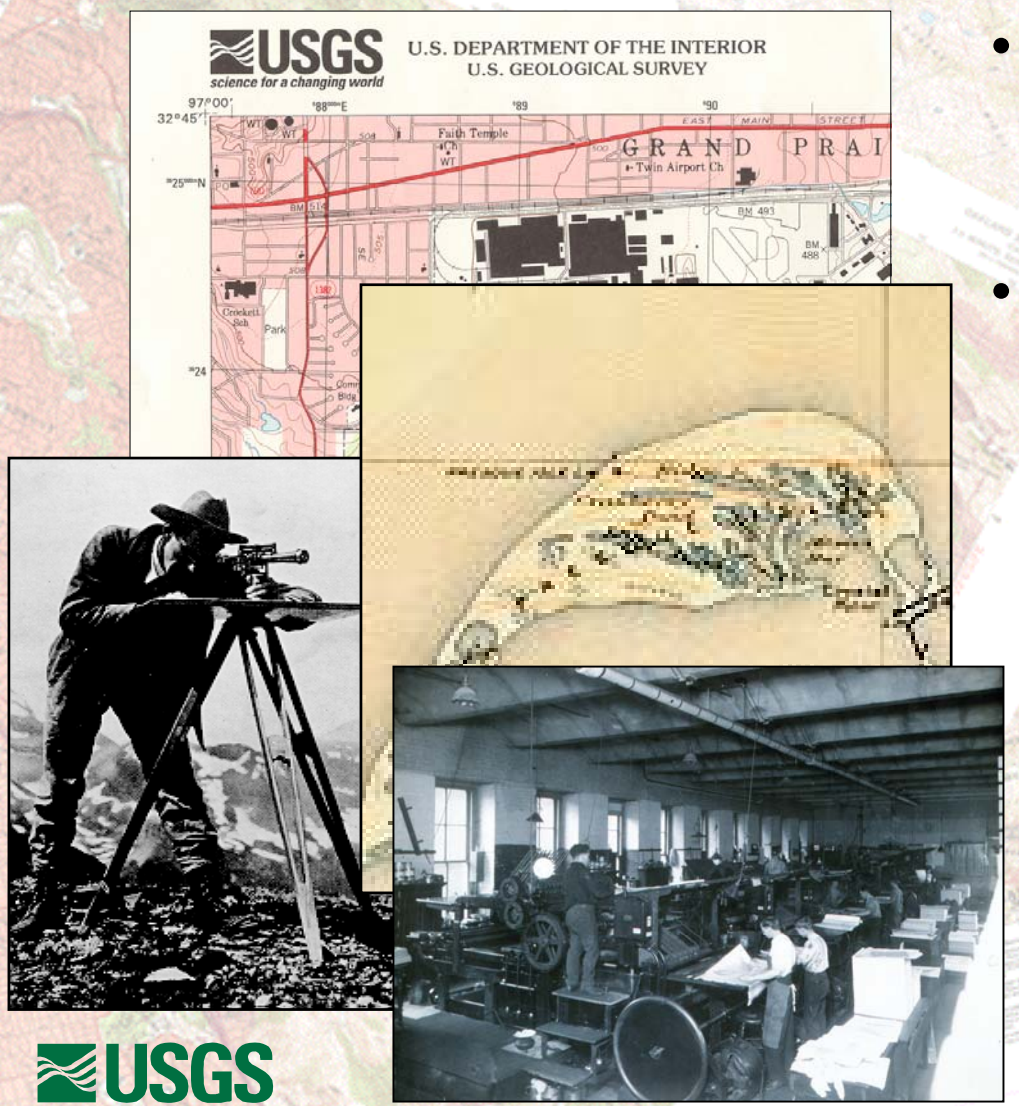
- Map information is an infrastructure in itself.
- Map information fuels the economy.
- Partnerships are required among State, local, and Federal agencies, and the private sector.
- Data must exist and be readily accessible.



(Courtesy of EarthData)

USGS

National Mapping in the Last Century



- National coverage was an immense engineering feat
- Only national synthesis of topographic content that is
  - Comprehensive
  - Accurate
  - Consistent
  - Cross-jurisdictional
  - Available nationally

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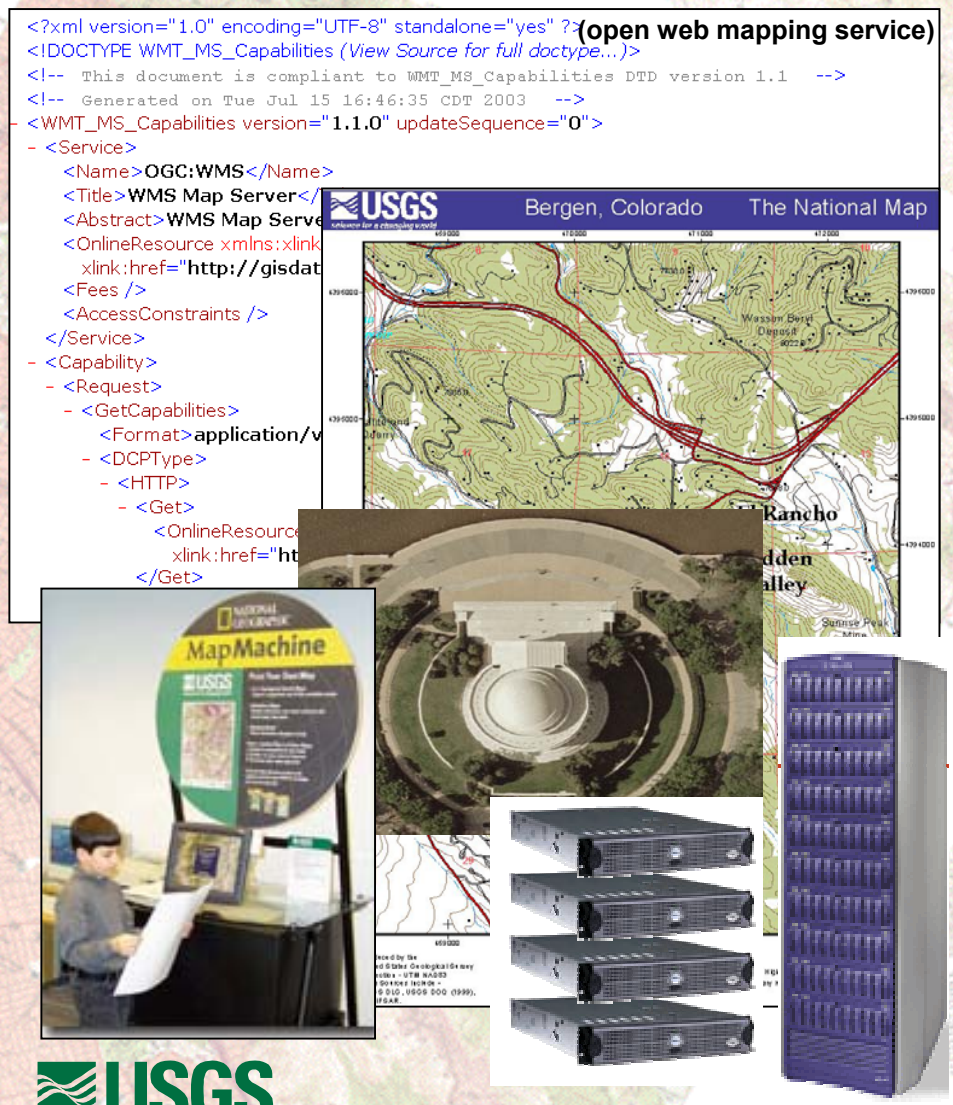
National Mapping in the 21st Century

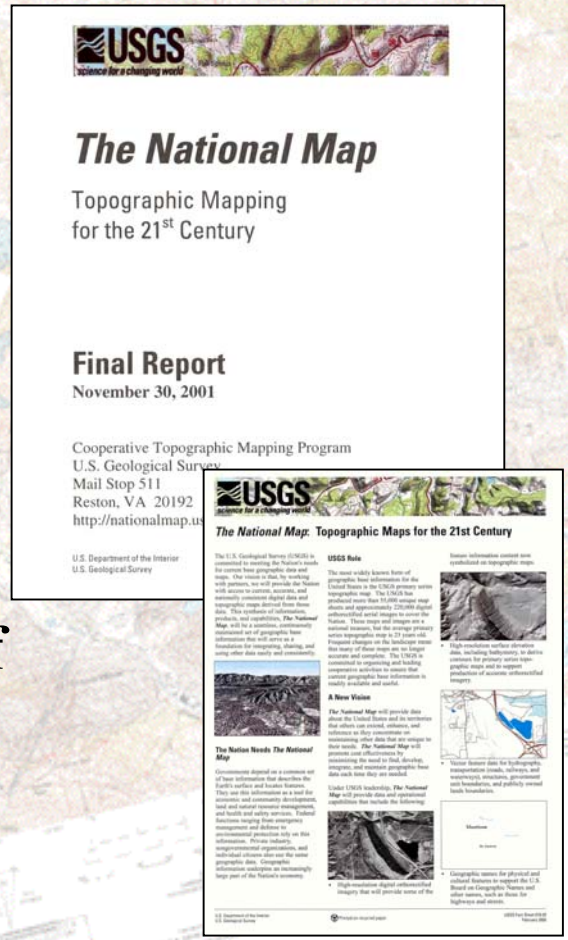


- National coverage is an immense engineering, partnership, and governance feat
- Only national synthesis of topographic content that is
  - Comprehensive
  - Accurate
  - Consistent
  - Cross-jurisdictional
  - Available nationally
  - Seamless
  - Capable of being integrated with other data
  - Current
  - Available continually online
  - Maintained continually

USGS

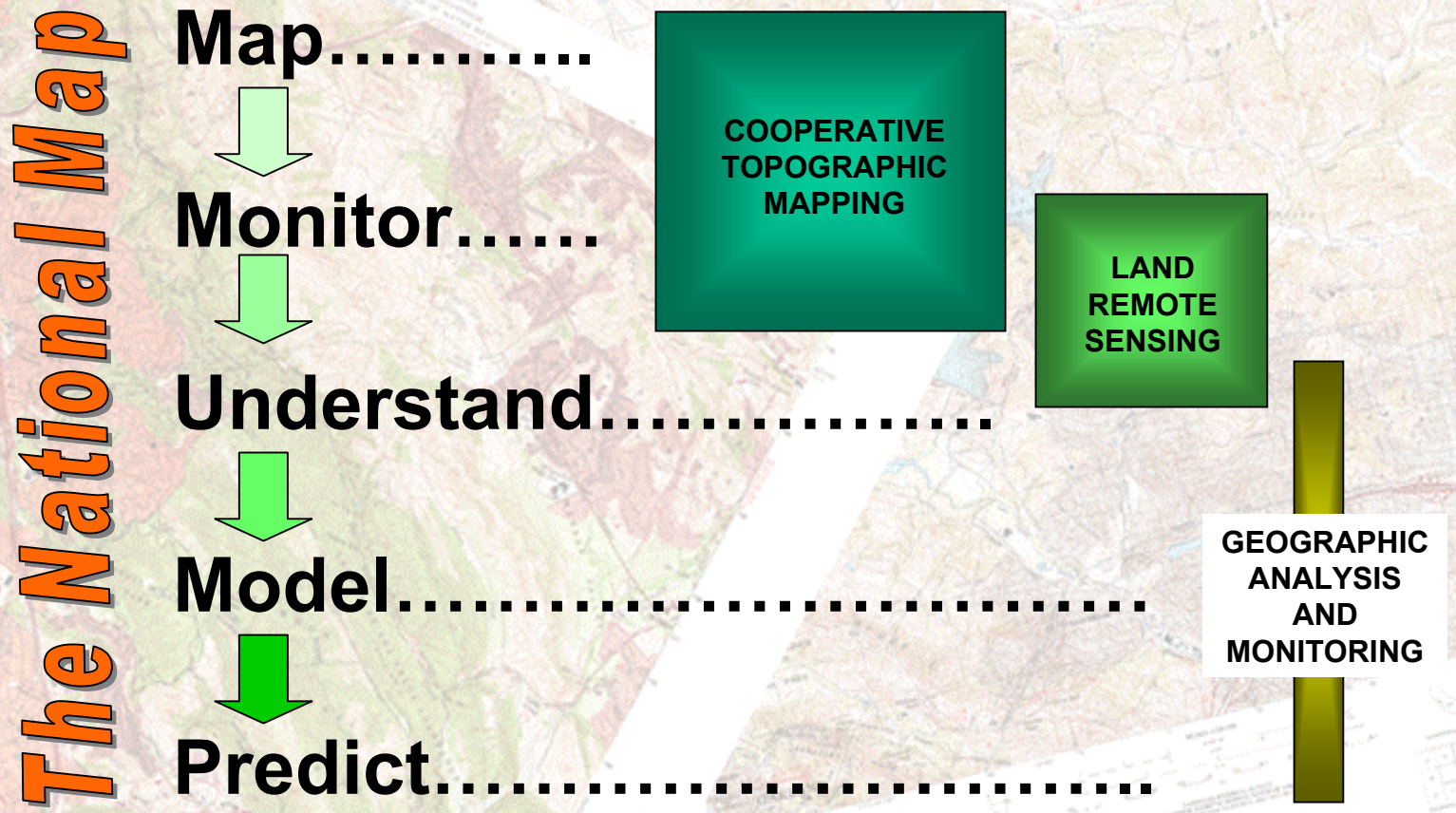
The National Map

- A seamless, continually maintained, nationally consistent set of base geographic data
- Data steward partnerships
- Relink the topographic map with underlying base geographic data
- Underpin Federal activities, and those of other public and private organizations
- Consistent with NSDI principles



USGS

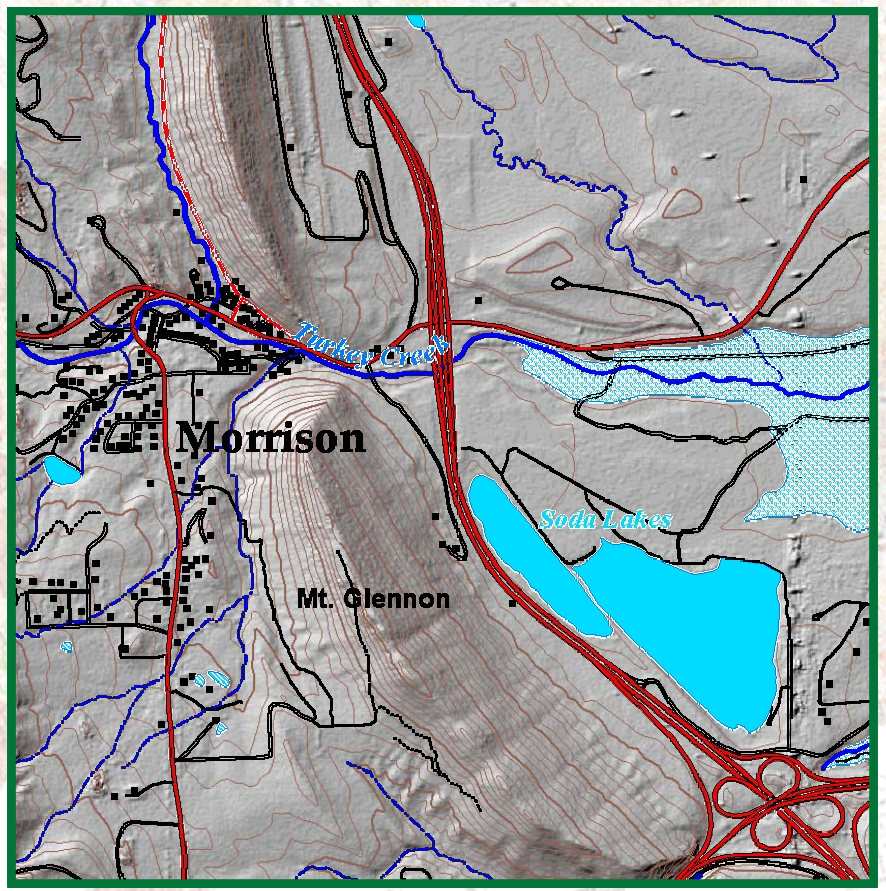
The National Map: Geographic Knowledge



USGS

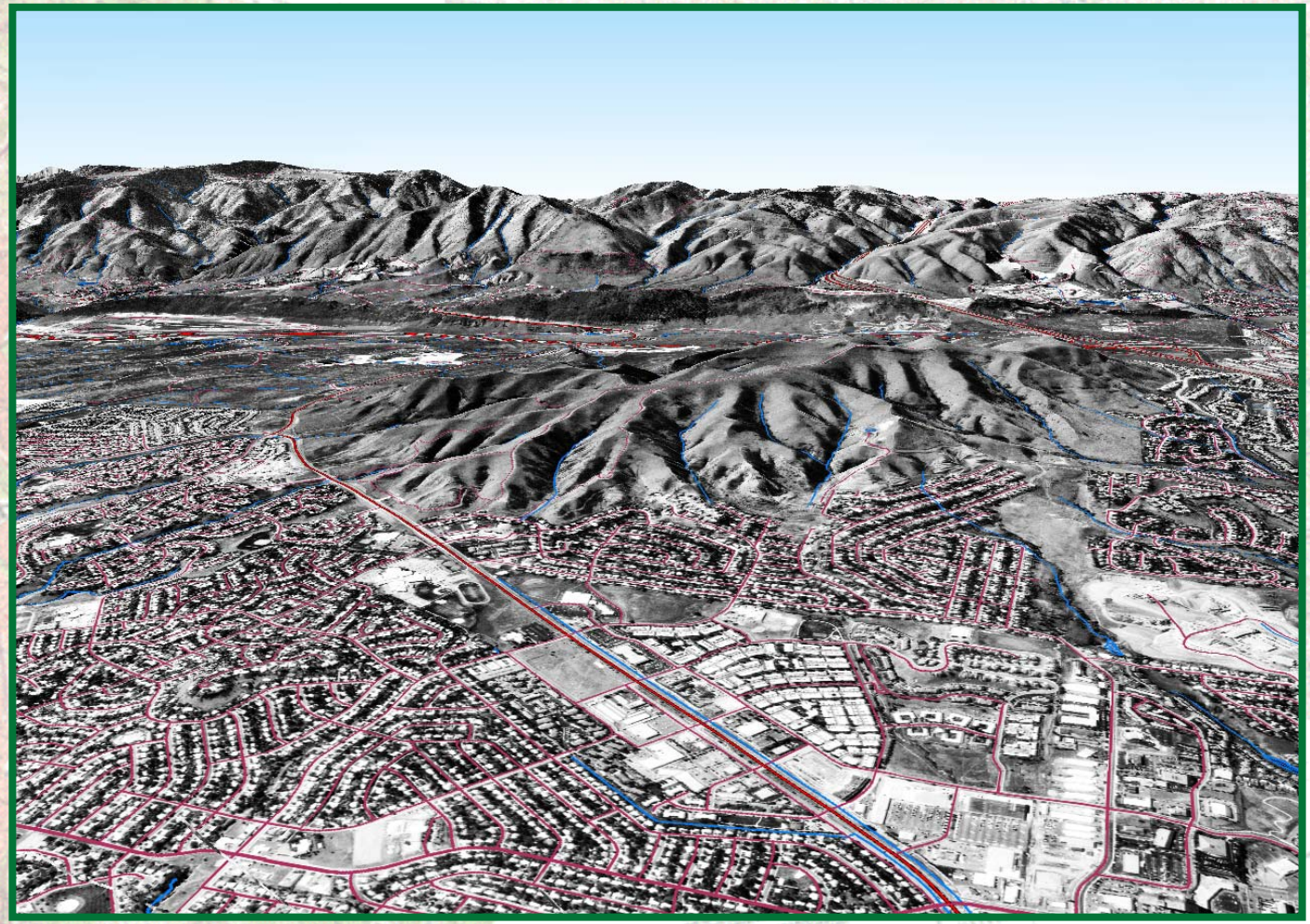
The National Map: Data Content

- Orthorectified imagery
- Land cover
- Elevation
- Vector layers:
  - Transportation
  - Hydrography
  - Structures
  - Boundaries
- Geographic names



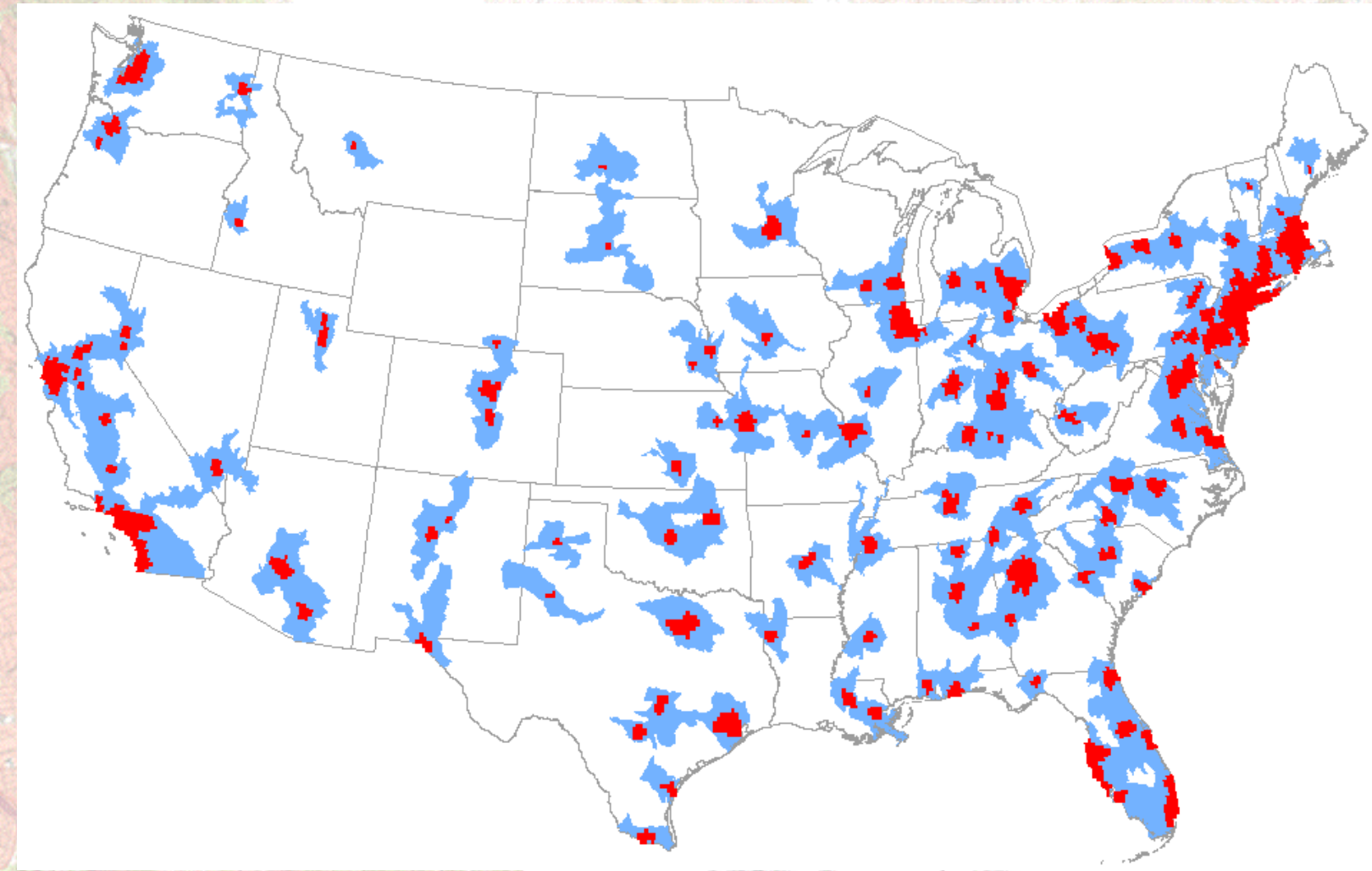
USGS

The National Map: An Integrated View



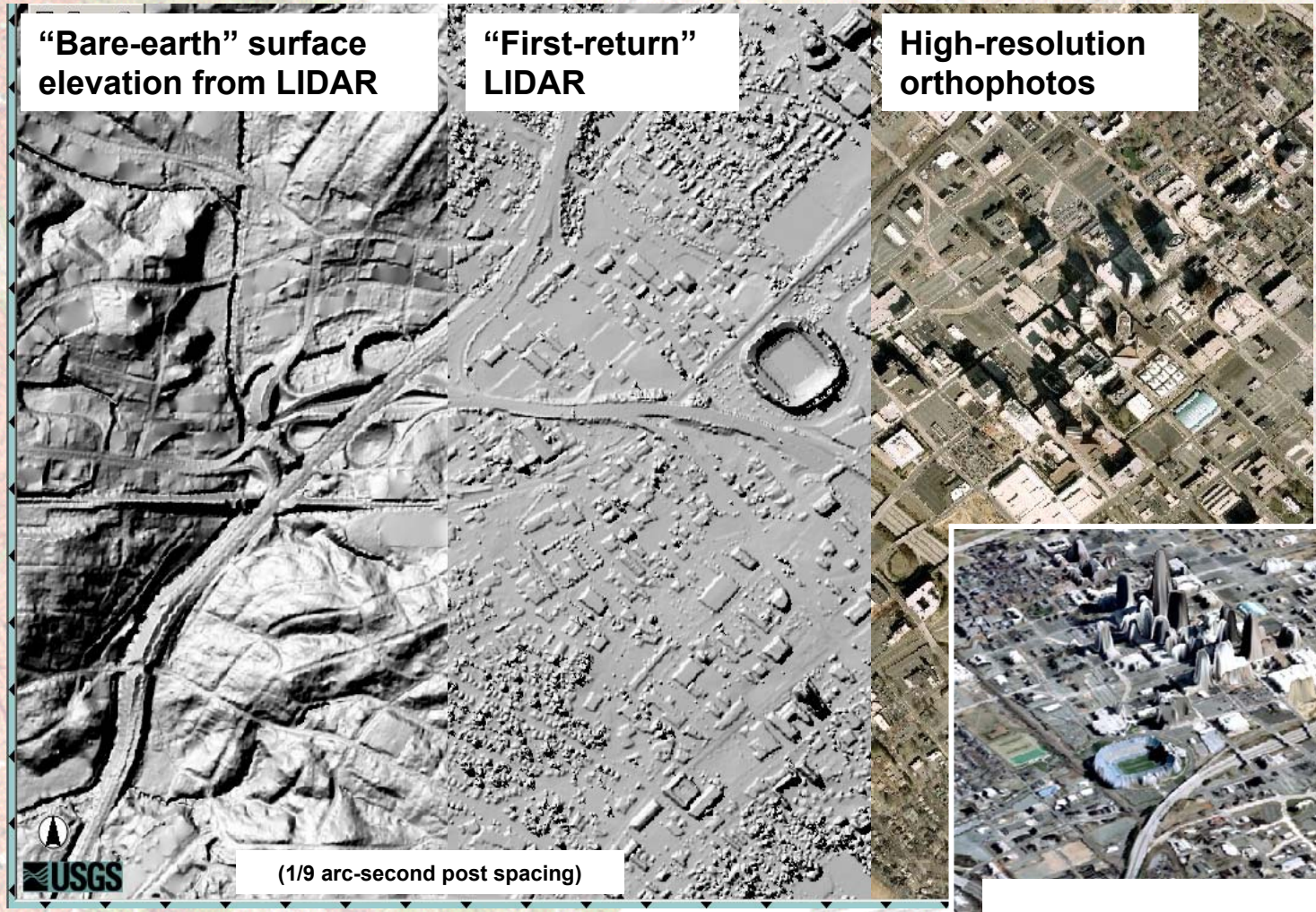
USGS

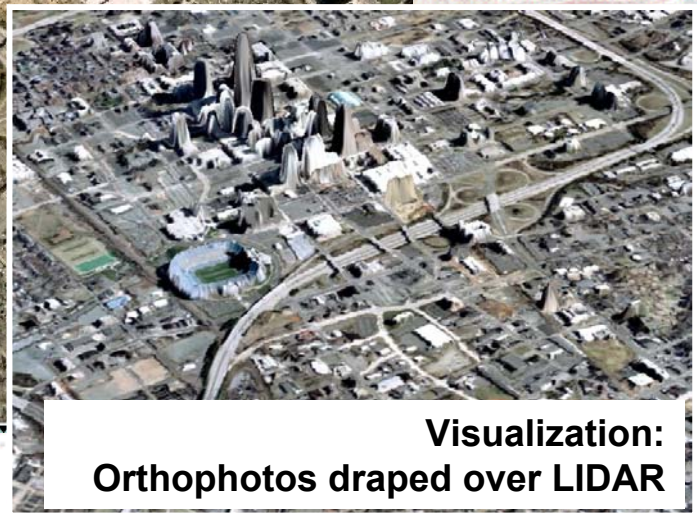
The National Map: Urban and Watershed Priority



USGS

The National Map: Anticipated Products





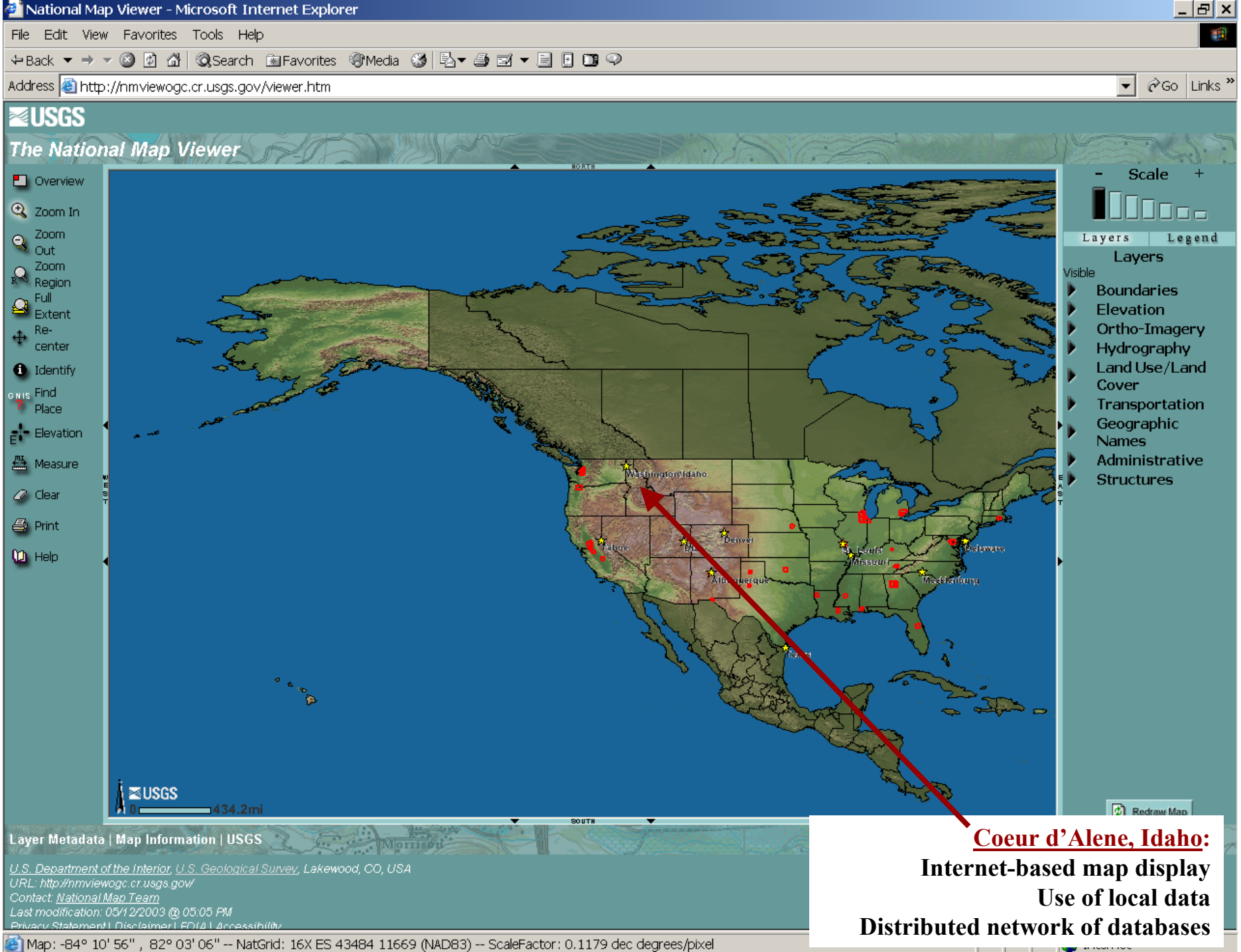
Visualization:
Orthophotos draped over LIDAR

USGS

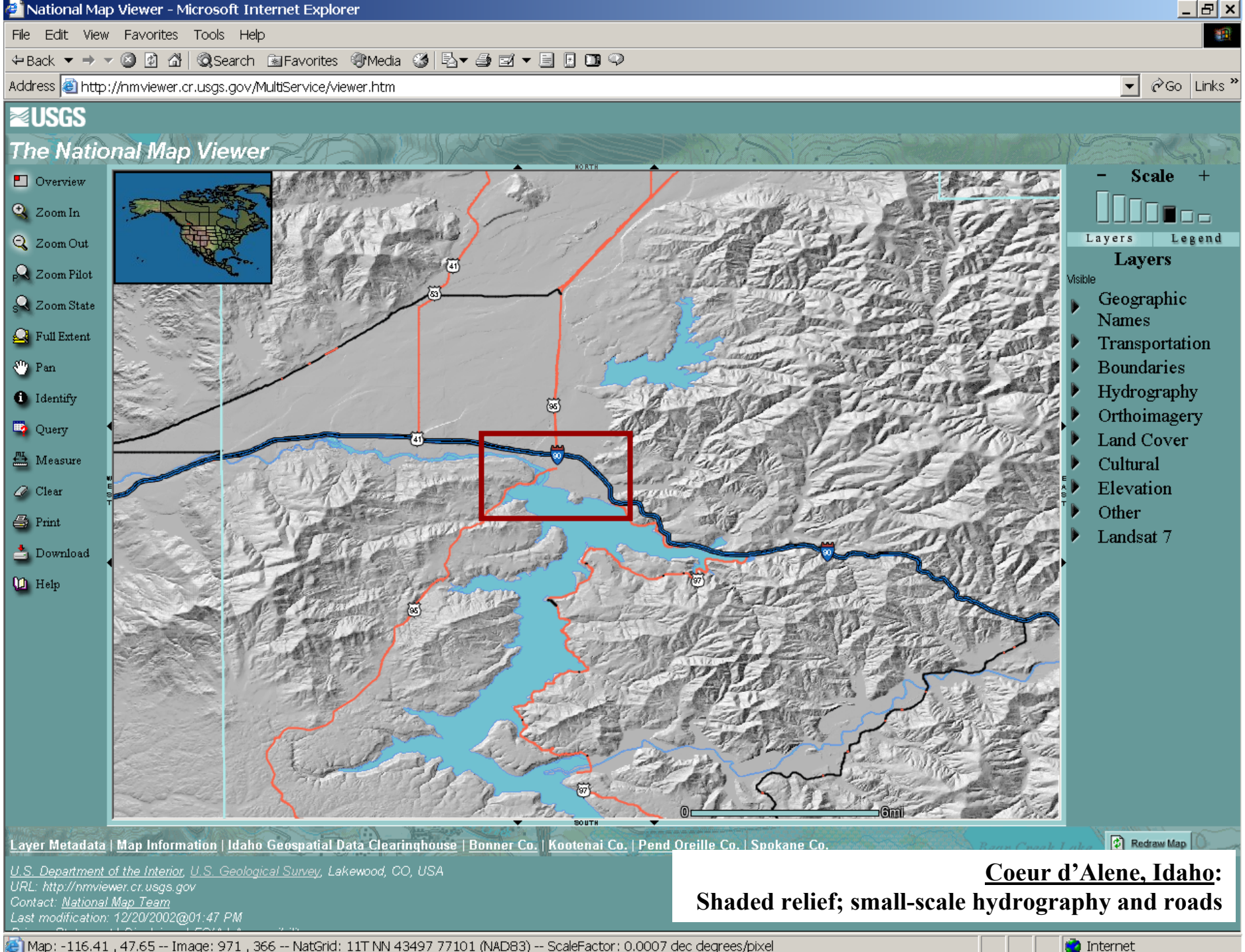
The National Map: Operations and Access

- Build initial version from best available data
- Work with State and local governments, as well as Federal agencies, to keep data current
- Based on networked, distributed collection of databases.
- Around-the-clock Internet access.
- Available in the public domain.
- Respond to requests for paper topographic maps and digital data.

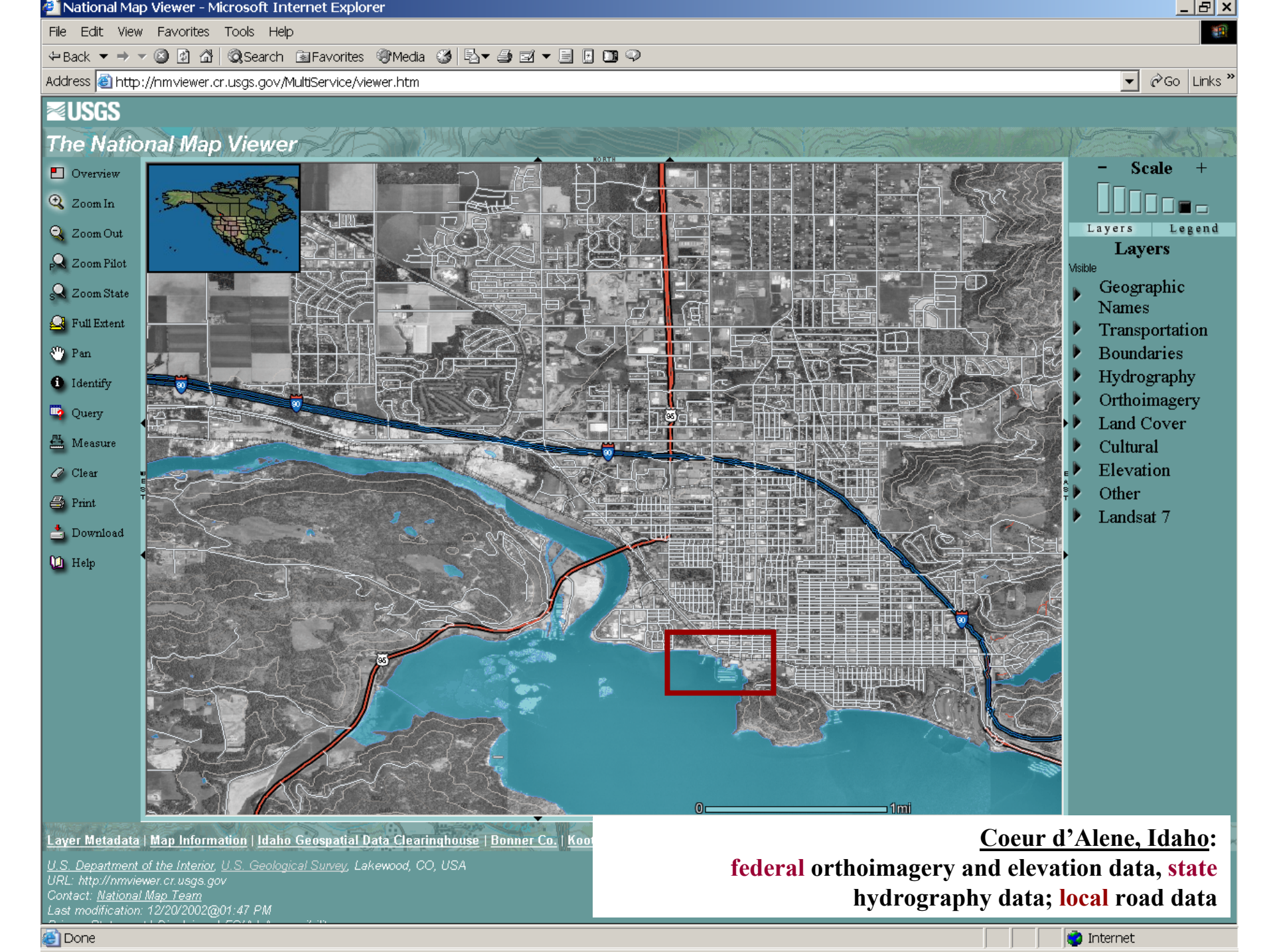
USGS



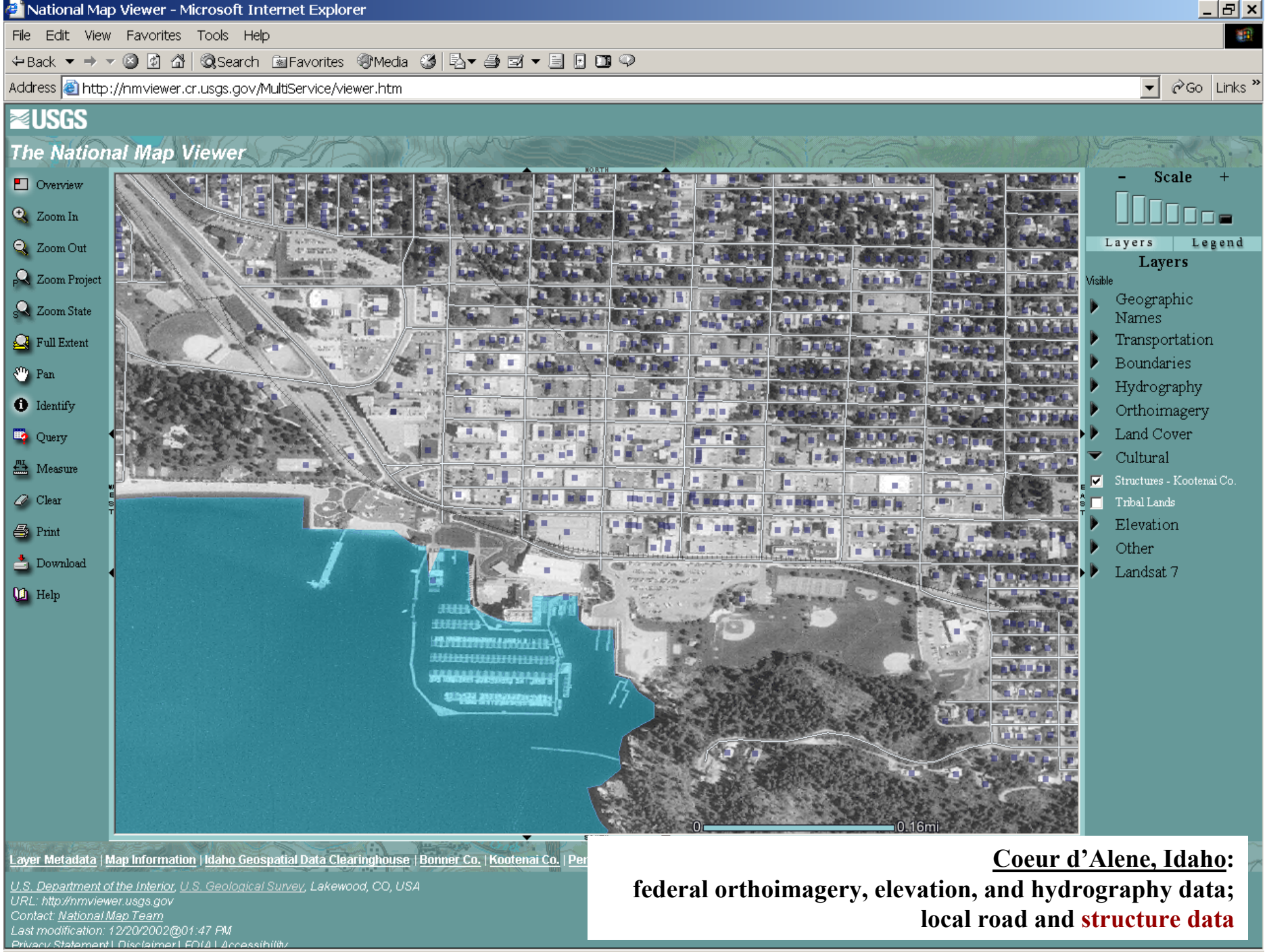
Coeur d'Alene, Idaho:
Internet-based map display
Use of local data
Distributed network of databases



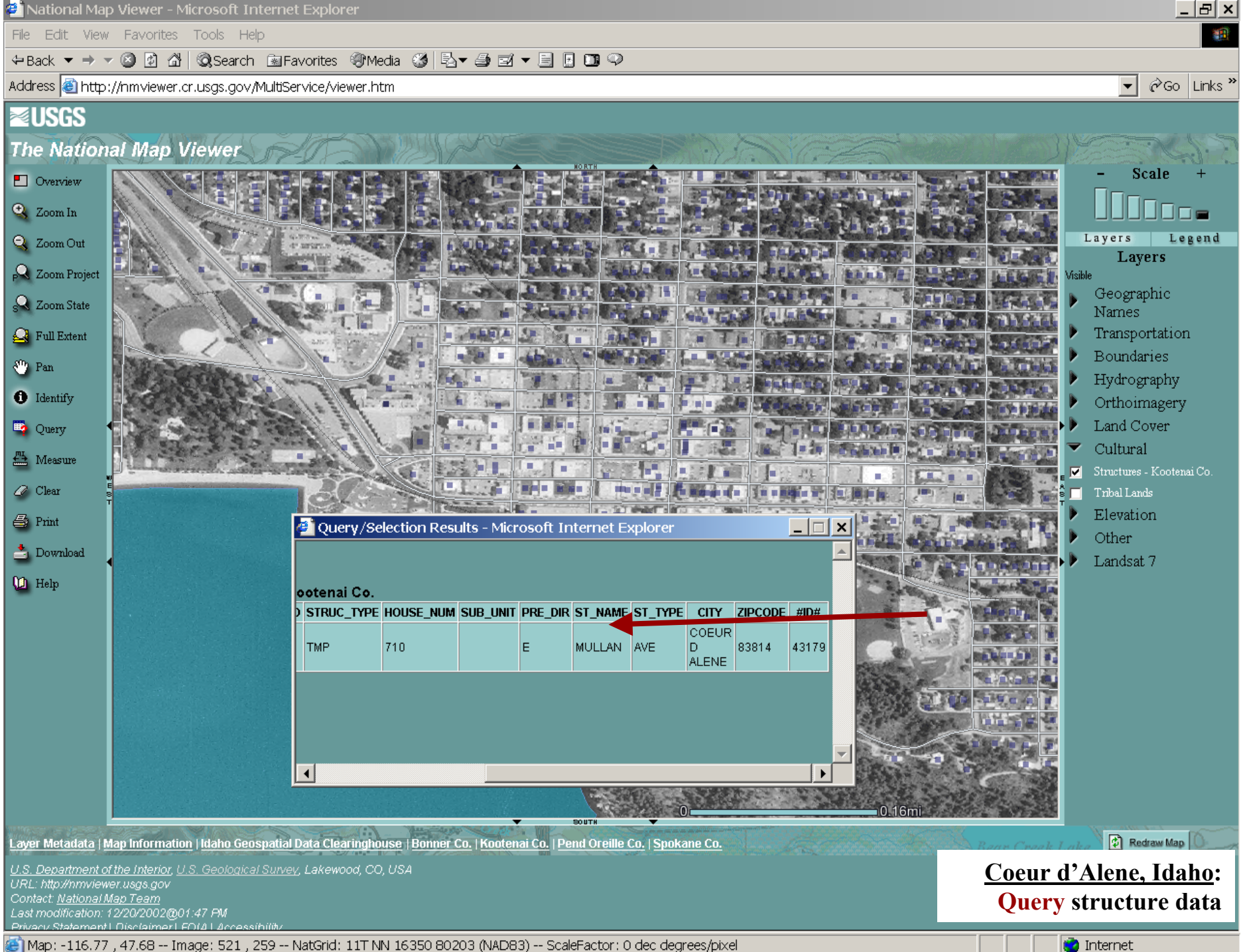
Coeur d'Alene, Idaho:
Shaded relief; small-scale hydrography and roads



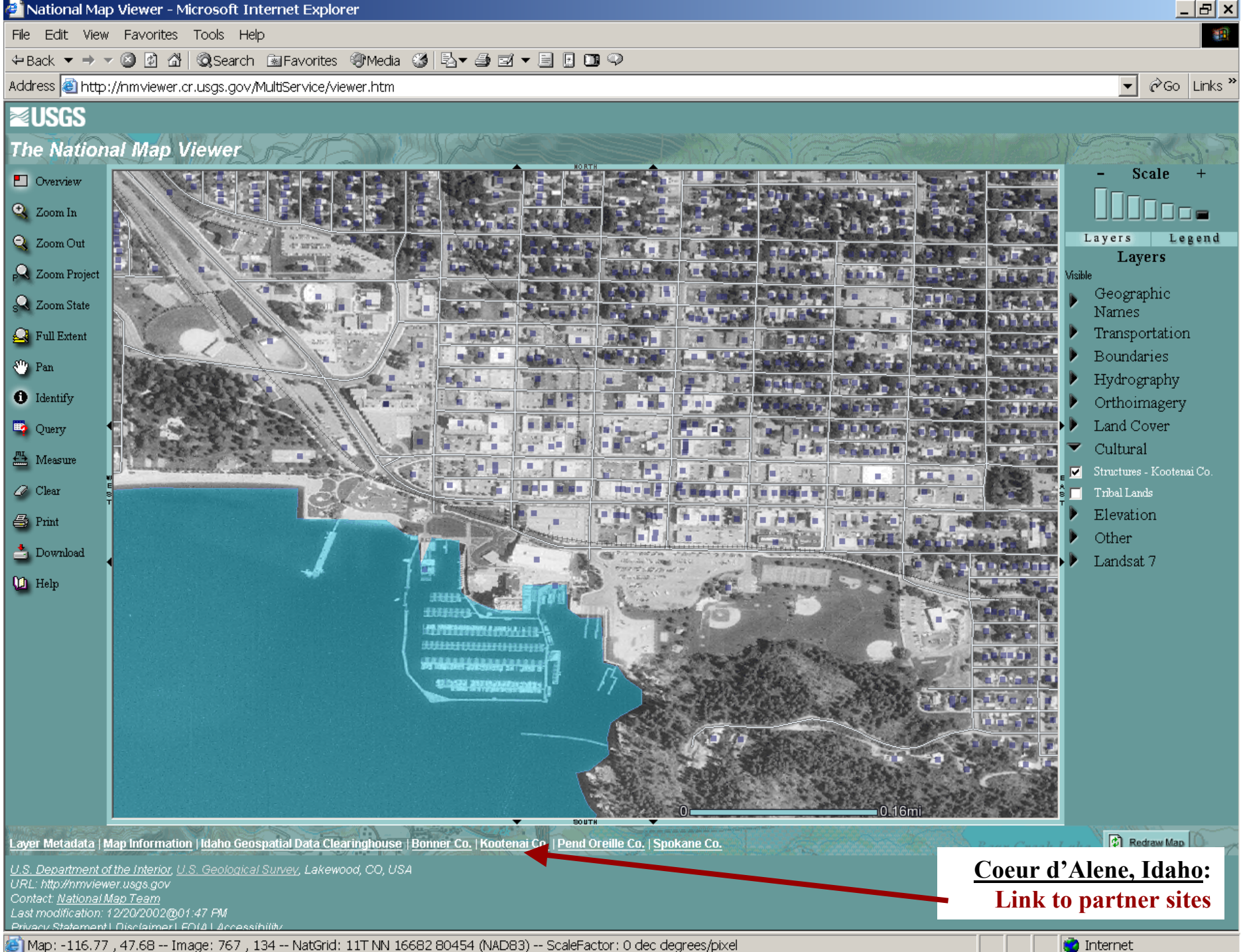
Coeur d'Alene, Idaho:
federal orthoimagery and elevation data, state hydrography data; local road data



Coeur d'Alene, Idaho:
federal orthoimagery, elevation, and hydrography data;
local road and structure data



Coeur d'Alene, Idaho:
Query structure data



Coeur d'Alene, Idaho:
Link to partner sites

Kootenai County, Idaho

Tel: (208) 446-1000
Email: kcinfo@kcgov.us

Welcome to the Kootenai County website.

The County seat is located in beautiful Coeur d'Alene, Idaho and is on the majestic shores of Lake Coeur d'Alene. Kootenai County is surrounded by scenic mountains and twenty more pristine lakes and is an outdoor enthusiast's dream. Recreational activities include hunting, boating, fishing, and snow skiing. The County's physical beauty and "livability" are partially responsible, especially in recent years, for an unprecedented population expansion and a rise in tourism as a major industry. These kinds of unique circumstances play a significant role in the challenges faced by Kootenai County government.

Current News and Events

8/19/2003 - **Airport Open House**

The Airport will be having an Open House on August 19th from 5:00 P.M. to 8:00 P.M.
-Bus Tours
-Food Service Available
-Information Booths
-Displays
-Helicopter Rides for $19.95

"Come see what's new at your Airport"
208-772-7838 www.cdaairport.com

7/26/2003 - **Safe Boating Education Class**

Safe Boating Education Class 8:30-5:00pm
IDPR Headquarters, 2740 Kathleen Avenue
Coeur d'Alene
Contact: Cindy Langlitz, 446-1277

7/11/2003 - **Public Defender's Moving**

Current Weather

Coeur d' Alene, ID
Reported by Coeur d'Alene, ID
Fair

Fri Jul 18 12:34 PM PT
Temperature: 97°F/36°C
Humidity: 13%
Barometer: 30.15in/1022mb
Winds: N at 7mph/11kph

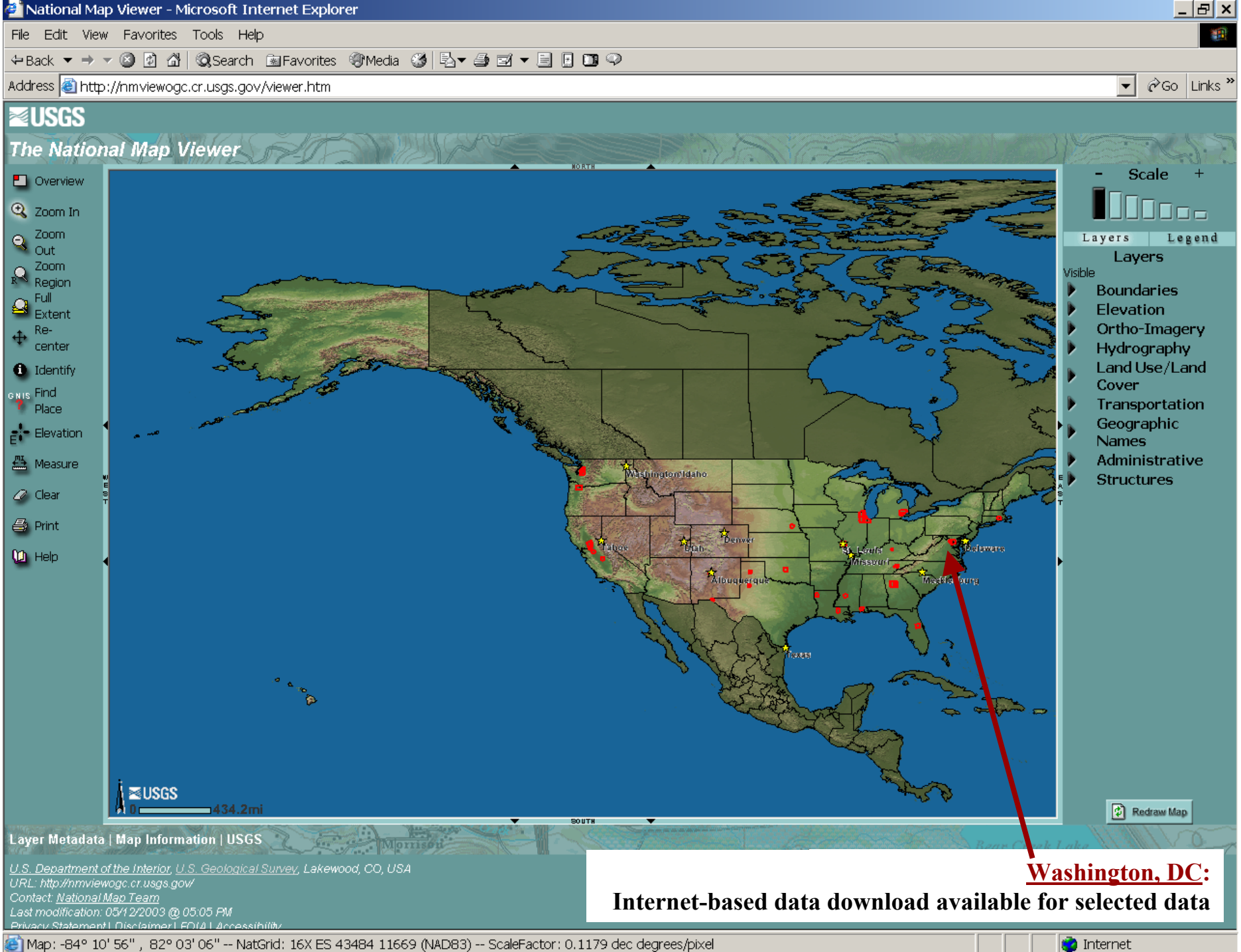
Click for Forecast
THE WEATHER CHANNEL
weather.com

Mission Statement

It is the mission of Kootenai County government to provide professional service with regard to public safety, essential service, preservation of natural resources and the responsible management of public assets for the common well-being of our citizens.

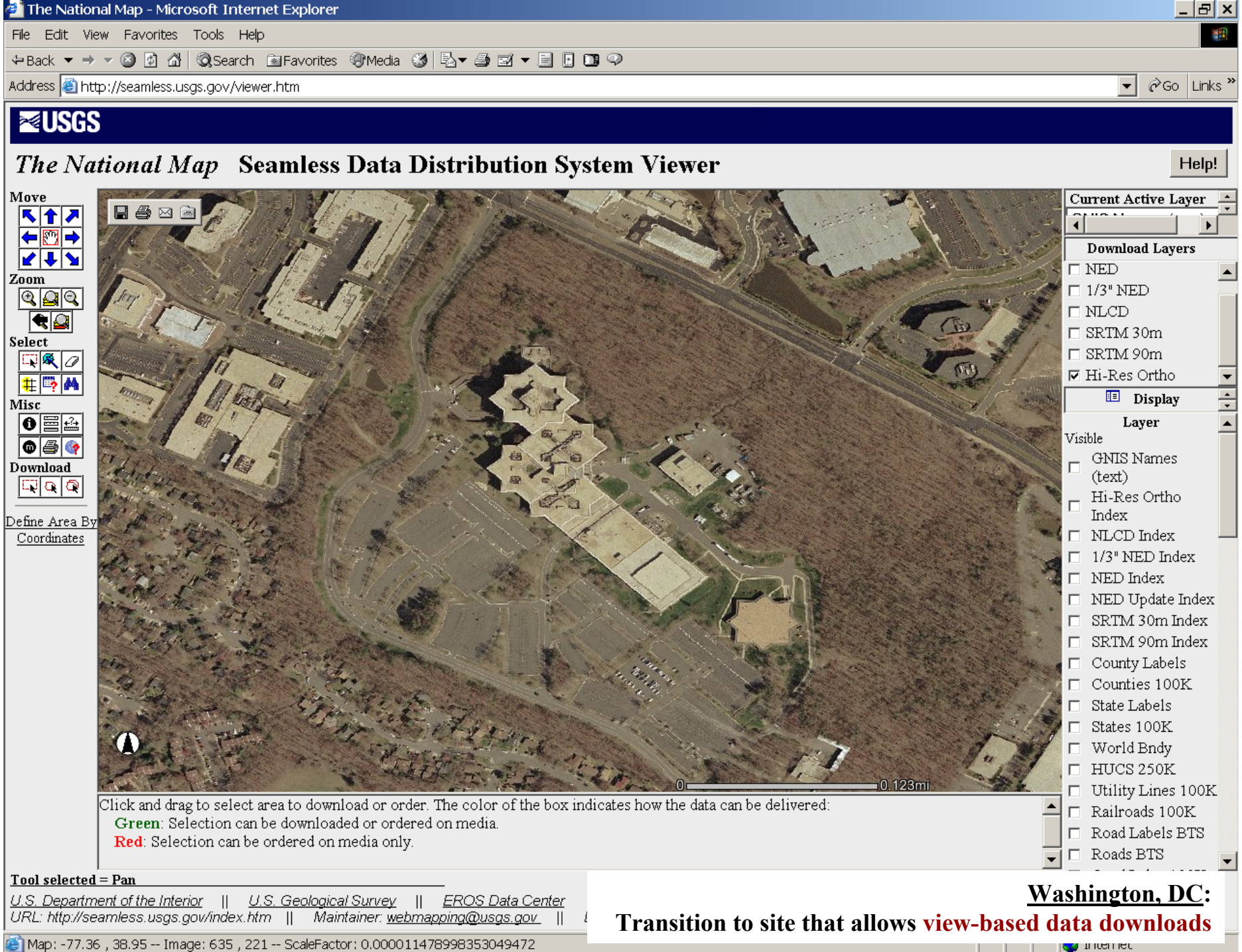
Vision Statement

An innovative, cost effective government the



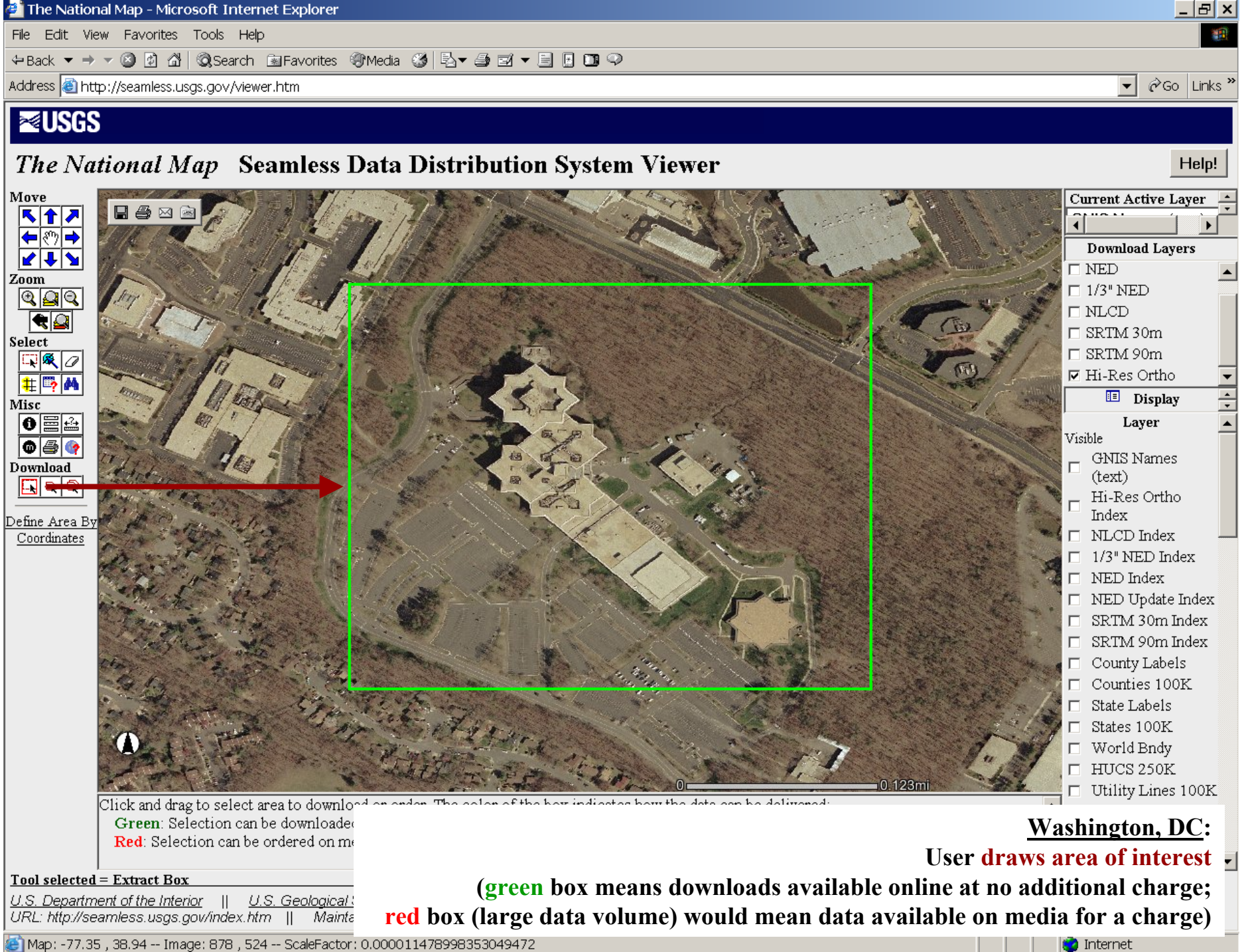
Washington, DC:

Internet-based data download available for selected data



Washington, DC:

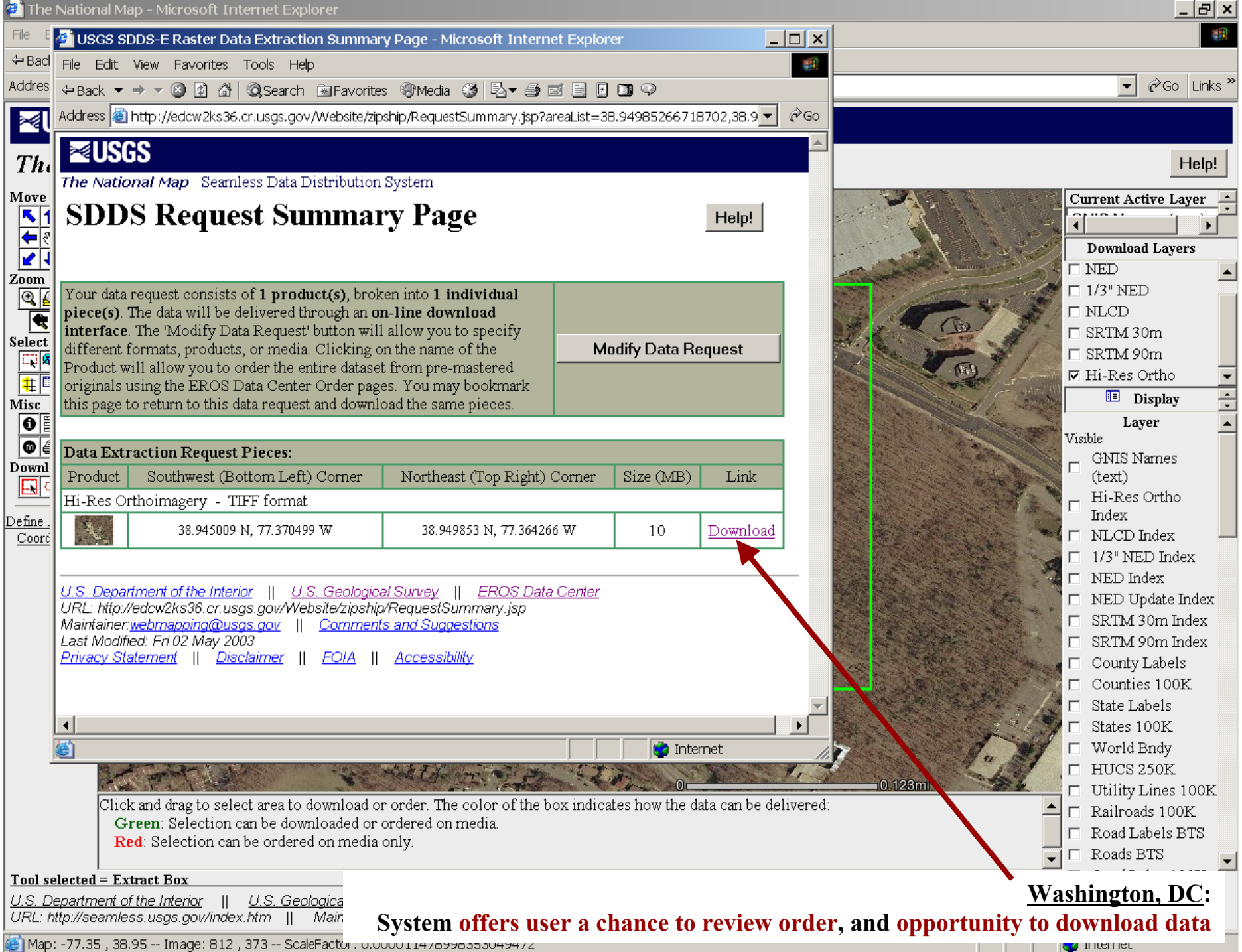
Transition to site that allows view-based data downloads

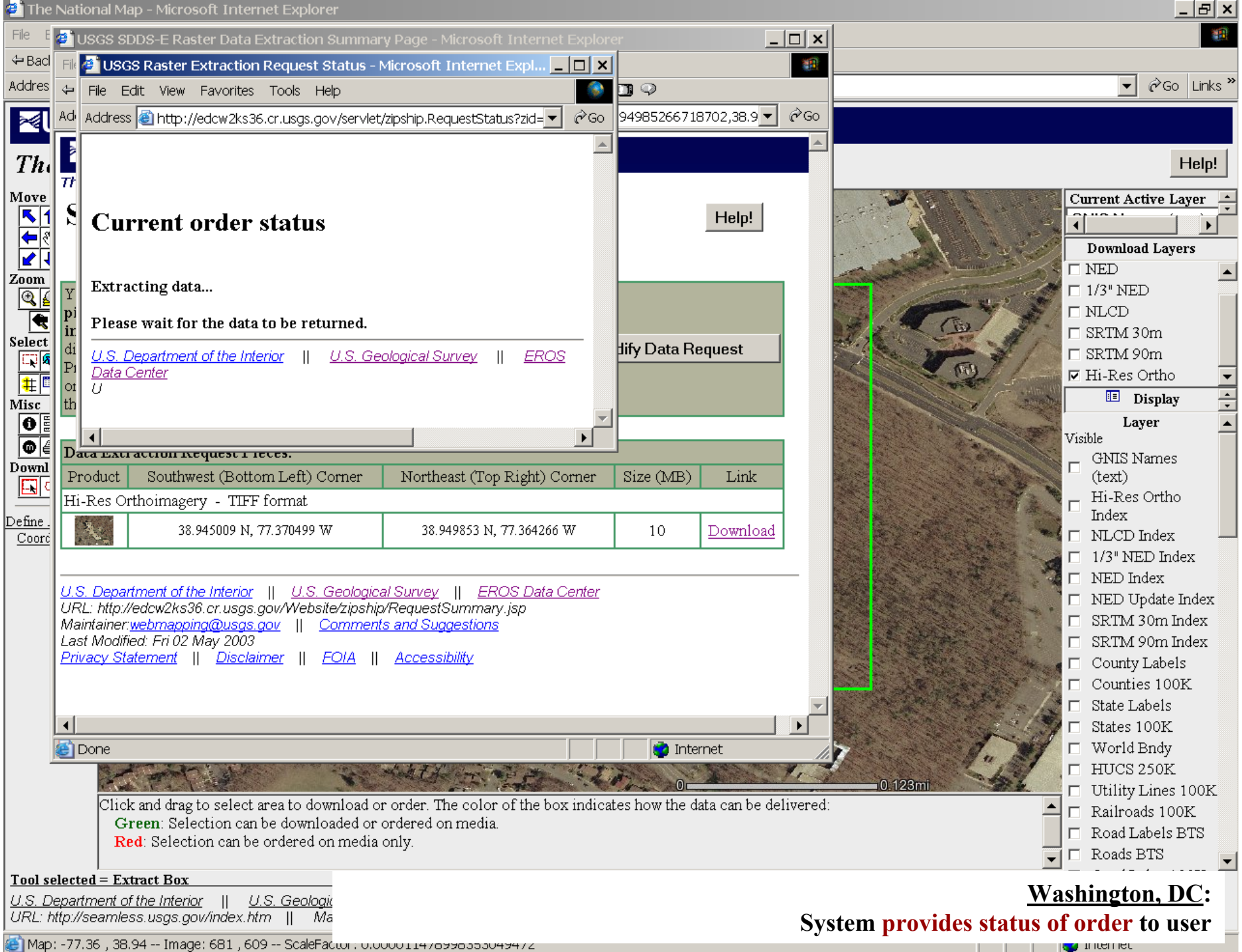


Washington, DC:

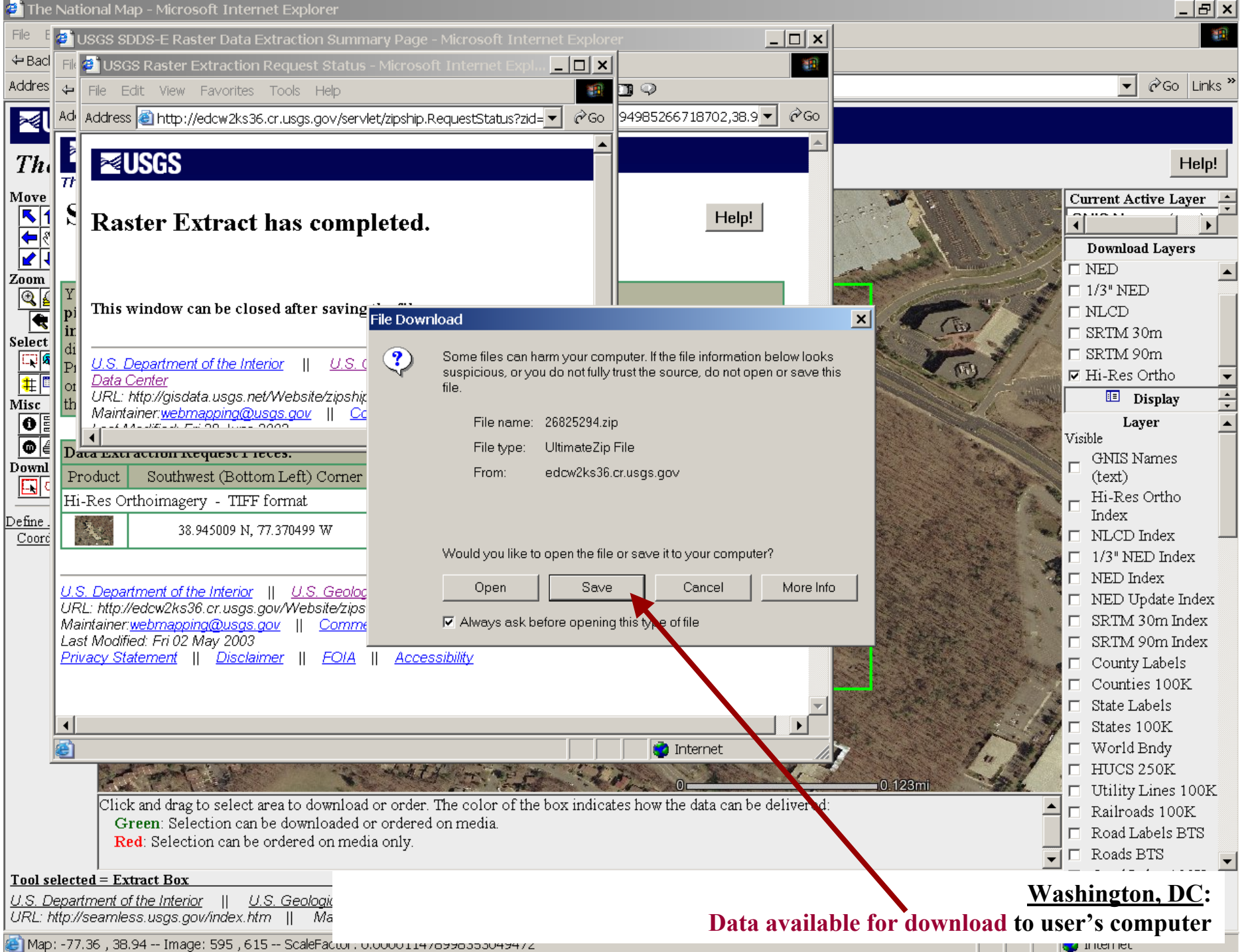
User draws area of interest

(green box means downloads available online at no additional charge; red box (large data volume) would mean data available on media for a charge)


The National Map - Microsoft Internet Explorer
USGS SDDS-E Raster Data Extraction Summary Page - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Address http://edcw2ks36.cr.usgs.gov/Website/zipship/RequestSummary.jsp?areaList=38.94985266718702,38.9
USGS
The National Map Seamless Data Distribution System
SDDS Request Summary Page
Help!
Your data request consists of 1 product(s), broken into 1 individual piece(s). The data will be delivered through an on-line download interface. The 'Modify Data Request' button will allow you to specify different formats, products, or media. Clicking on the name of the Product will allow you to order the entire dataset from pre-mastered originals using the EROS Data Center Order pages. You may bookmark this page to return to this data request and download the same pieces.
Modify Data Request
Data Extraction Request Pieces:
Product
Southwest (Bottom Left) Corner
Northeast (Top Right) Corner
Size (MB)
Link
Hi-Res Orthoimagery - TIFF format
38.945009 N, 77.370499 W
38.949853 N, 77.364266 W
10
Download
U.S. Department of the Interior || U.S. Geological Survey || EROS Data Center
URL: http://edcw2ks36.cr.usgs.gov/Website/zipship/RequestSummary.jsp
Maintainer:webmapping@usgs.gov || Comments and Suggestions
Last Modified: Fri 02 May 2003
Privacy Statement || Disclaimer || FOIA || Accessibility
Internet
Current Active Layer
Download Layers
NED
1/3" NED
NLCD
SRTM 30m
SRTM 90m
Hi-Res Ortho
Display
Layer
Visible
GNIS Names (text)
Hi-Res Ortho Index
NLCD Index
1/3" NED Index
NED Index
NED Update Index
SRTM 30m Index
SRTM 90m Index
County Labels
Counties 100K
State Labels
States 100K
World Bndy
HUCS 250K
Utility Lines 100K
Railroads 100K
Road Labels BTS
Roads BTS
0
0.123mi
Click and drag to select area to download or order. The color of the box indicates how the data can be delivered:
Green: Selection can be downloaded or ordered on media.
Red: Selection can be ordered on media only.
Tool selected = Extract Box
U.S. Department of the Interior || U.S. Geological
URL: http://seamless.usgs.gov/index.htm ||
Map: -77.35 , 38.95 -- Image: 812 , 373 -- ScaleFactor
Washington, DC:
System offers user a chance to review order, and opportunity to download data



Washington, DC:
System provides status of order to user



Washington, DC:

Data available for download to user's computer

Washington, DC:

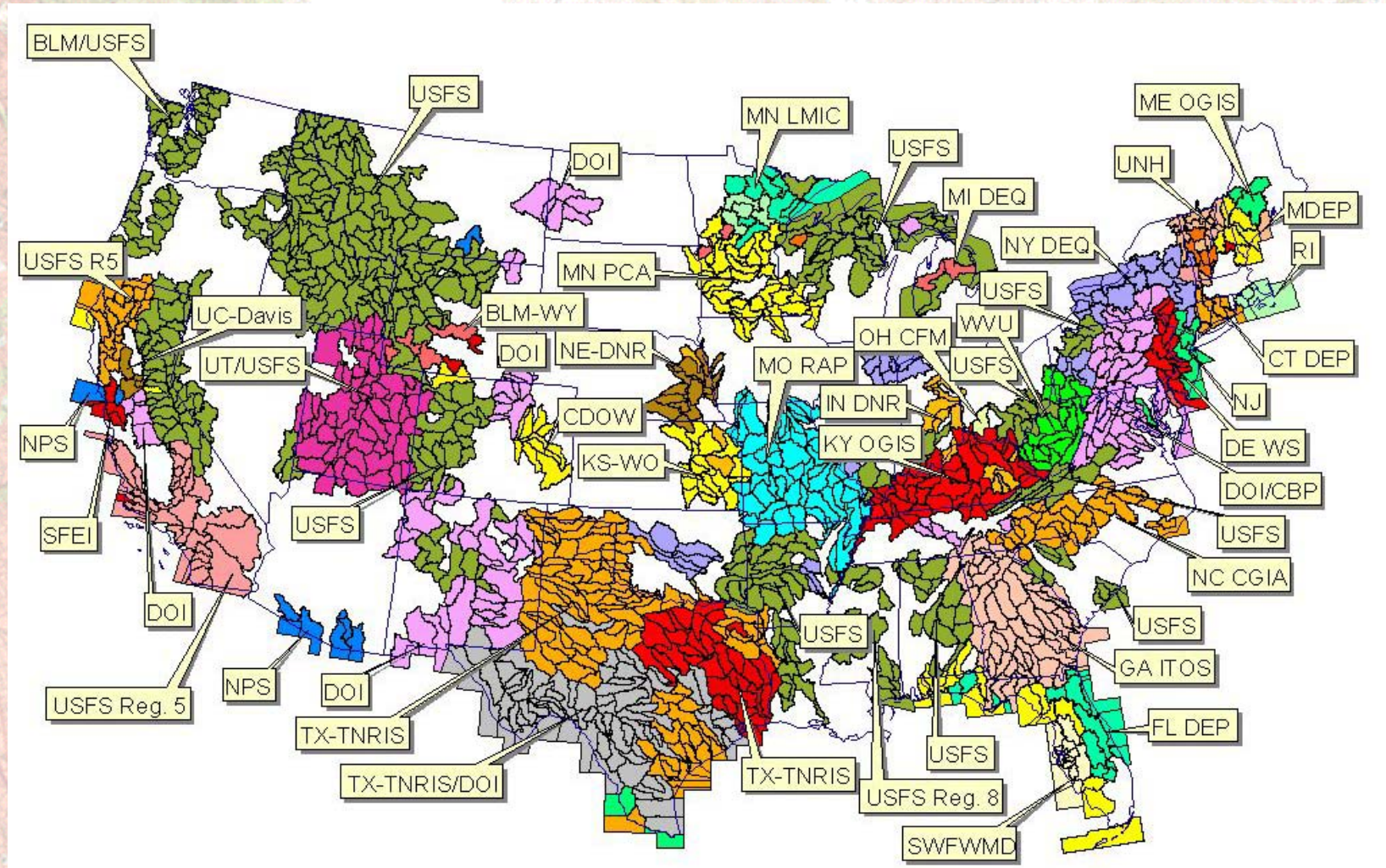
Selected data also are available online as an Open GIS Consortium-compliant web mapping service for direct use within geographic information system (GIS) software

The National Map: Partners' Roles

- **Federal**: identify needs and collaborate on data
- **State, Regional, and Local**: coordinate consortia, identify changes and provide updates, and collaborate on data
- **Private Industry**: provide tools, open standards, and data; conduct research
- **Academia**: provide training and conduct research
- **Libraries**: ensure public access to *The National Map*
- **Volunteers**: identify changes and provide updates
- **USGS**: catalyst, collaborator, integrator, producer when needed, archive, guarantor

USGS

Partnerships: Challenges and Opportunities



USGS

Example: Partnerships to develop hydrography data for *The National Map*
(Alaska and Hawaii are not shown)

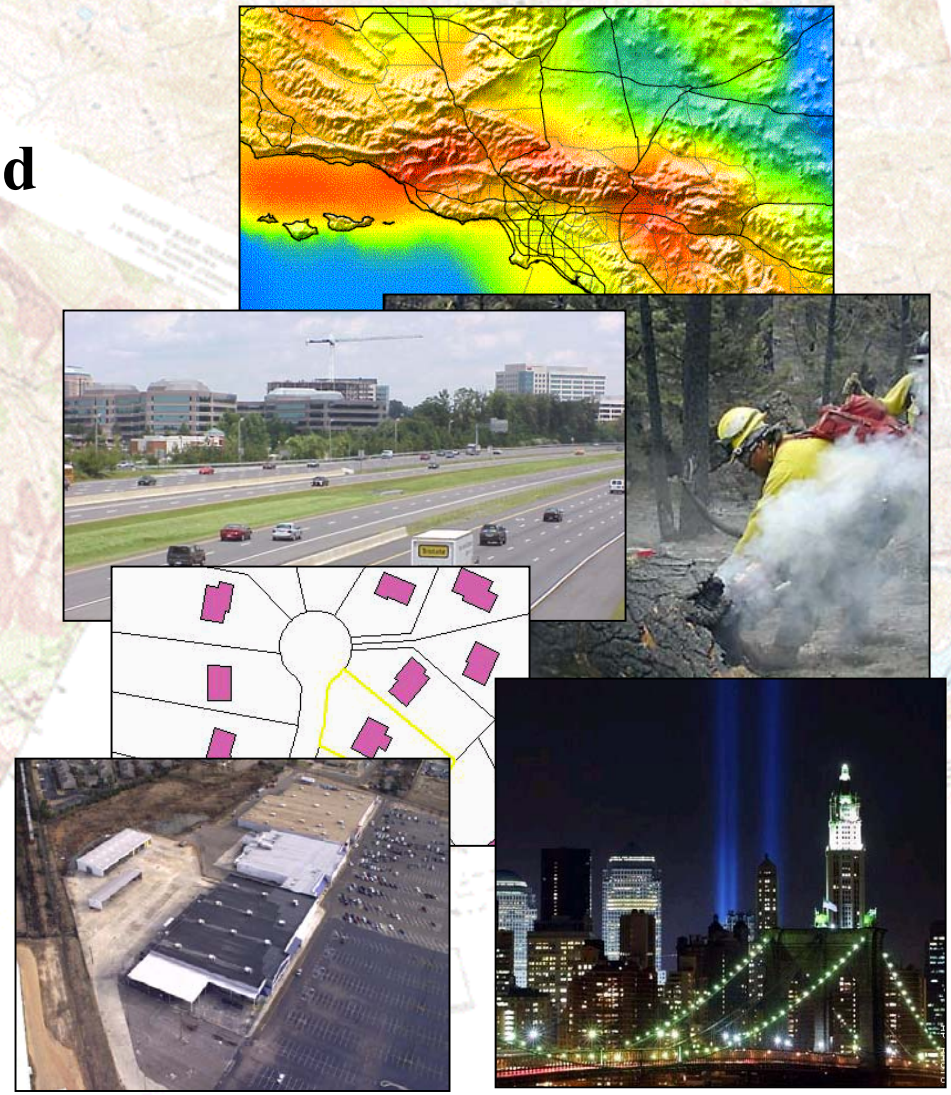
The National Map: Infrastructure Approach

- Analogy with the U.S. Interstate Highway System
  - Initiated for defense purposes – movement of troops and materiel
  - Required use of nationally-consistent standards – signage, road grades, on and off ramps
  - Constructed using Federal and State matching funds
  - Built largely by private contractors
  - Resulted in greatly improved interstate commerce and mobility

USGS

Value of Topographic Information

- Base for scientific studies
- Input to national policy and planning decision making
- Key to effective land and resource management
- Essential for efficient delivery of government services
- Foundation for economic enterprise
- Critical for homeland security



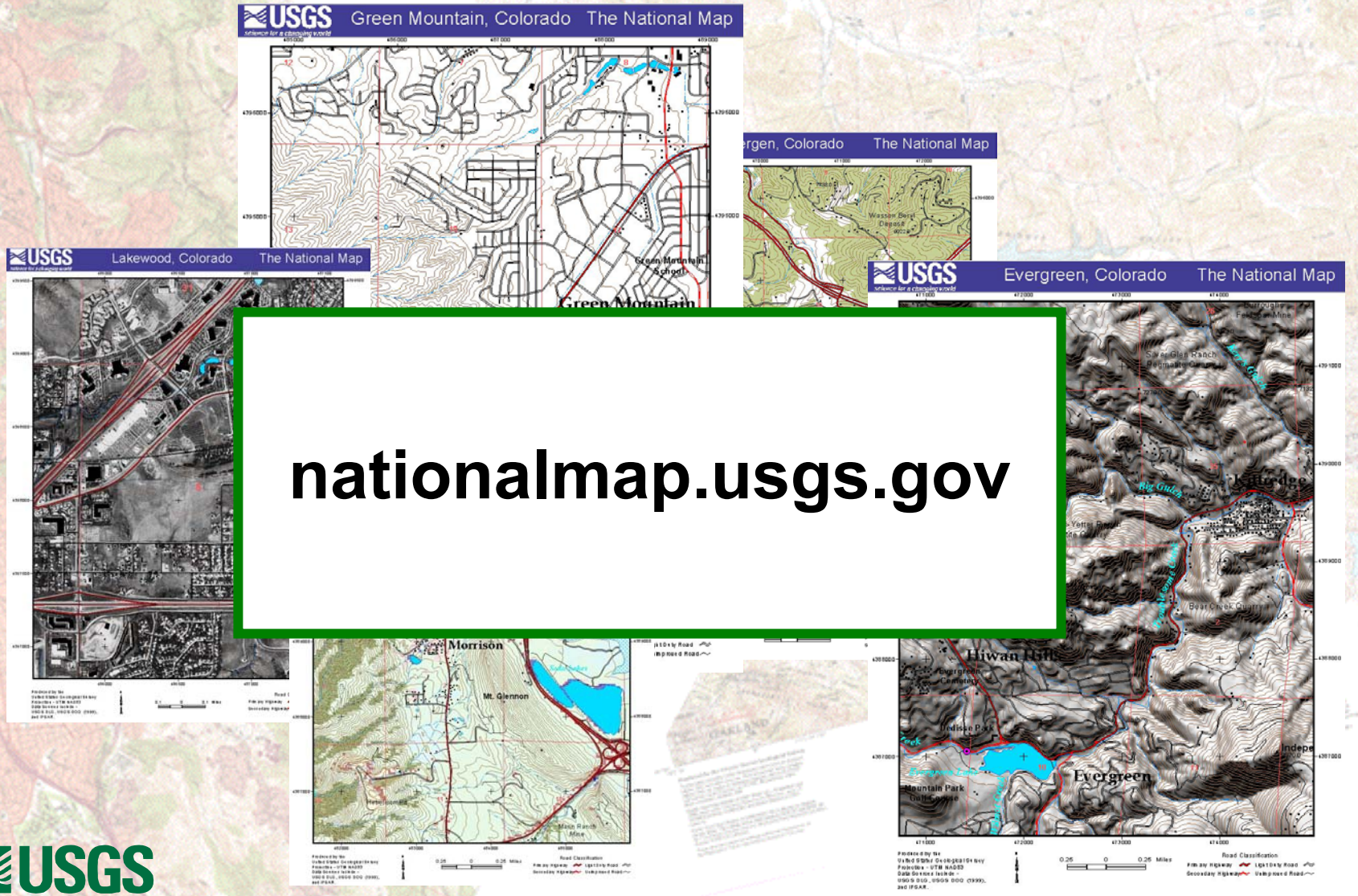
USGS

The National Map: Leadership Challenges

- Understanding the role of *The National Map* in the NSDI
- Communicating the importance of geospatial data to policy makers
- Quantifying the cost/benefit of integrated data
- Developing consistent policies for sharing data
- (Re)Learning the lessons of September 11

USGS

The National Map

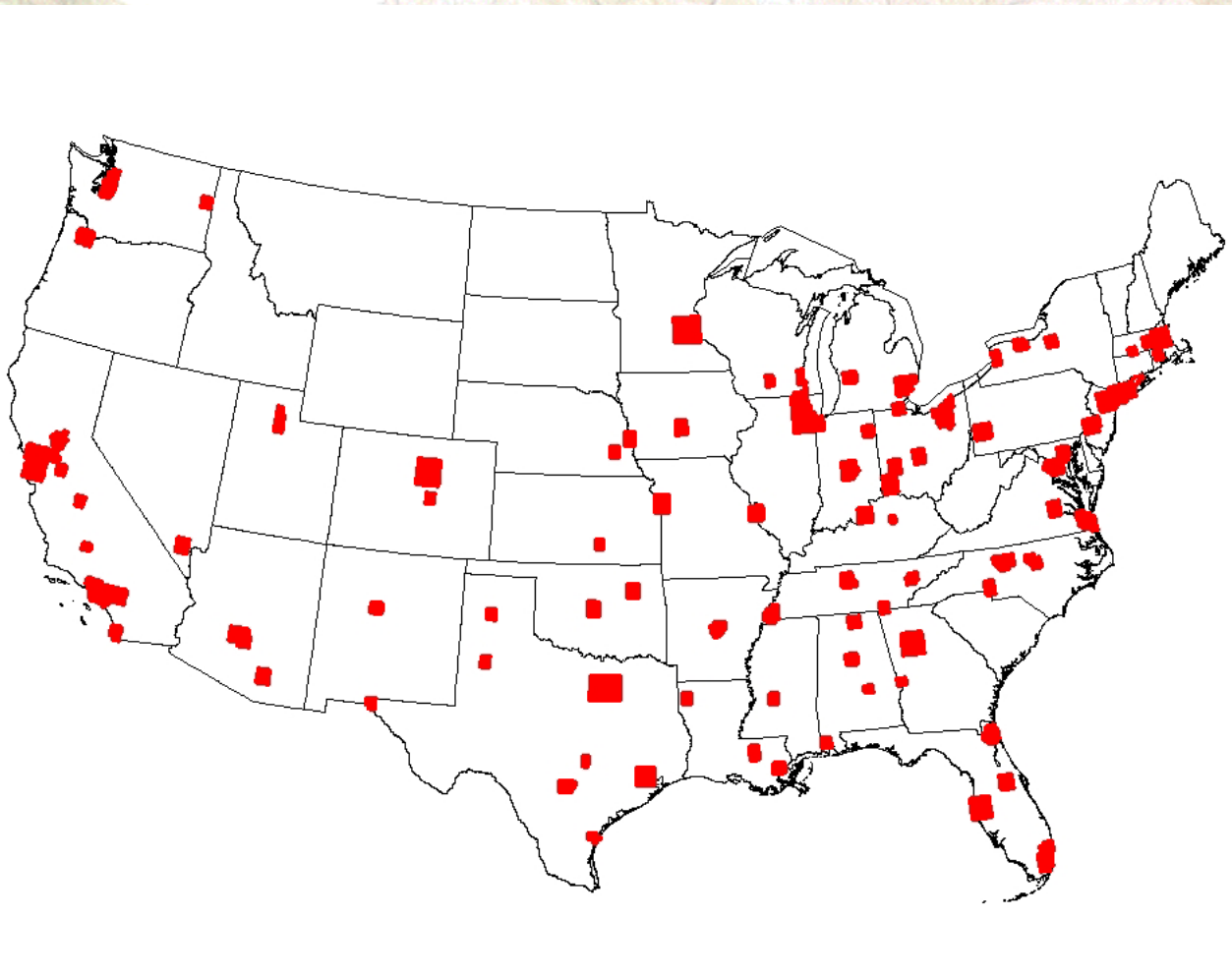


USGS

Selected Infrastructure

USGS

Populated Places



USGS

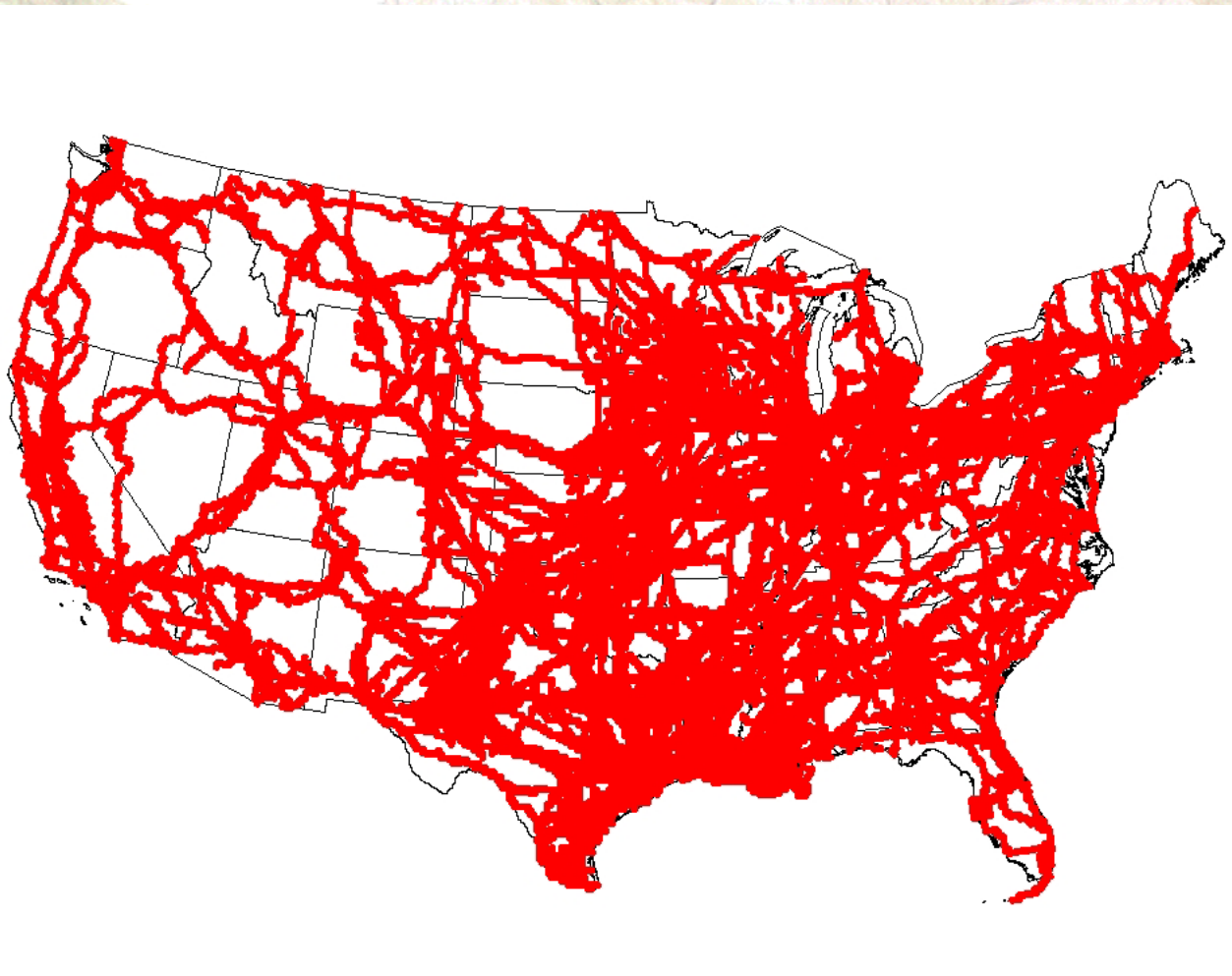
Major Roads

USGS

Major Railroads

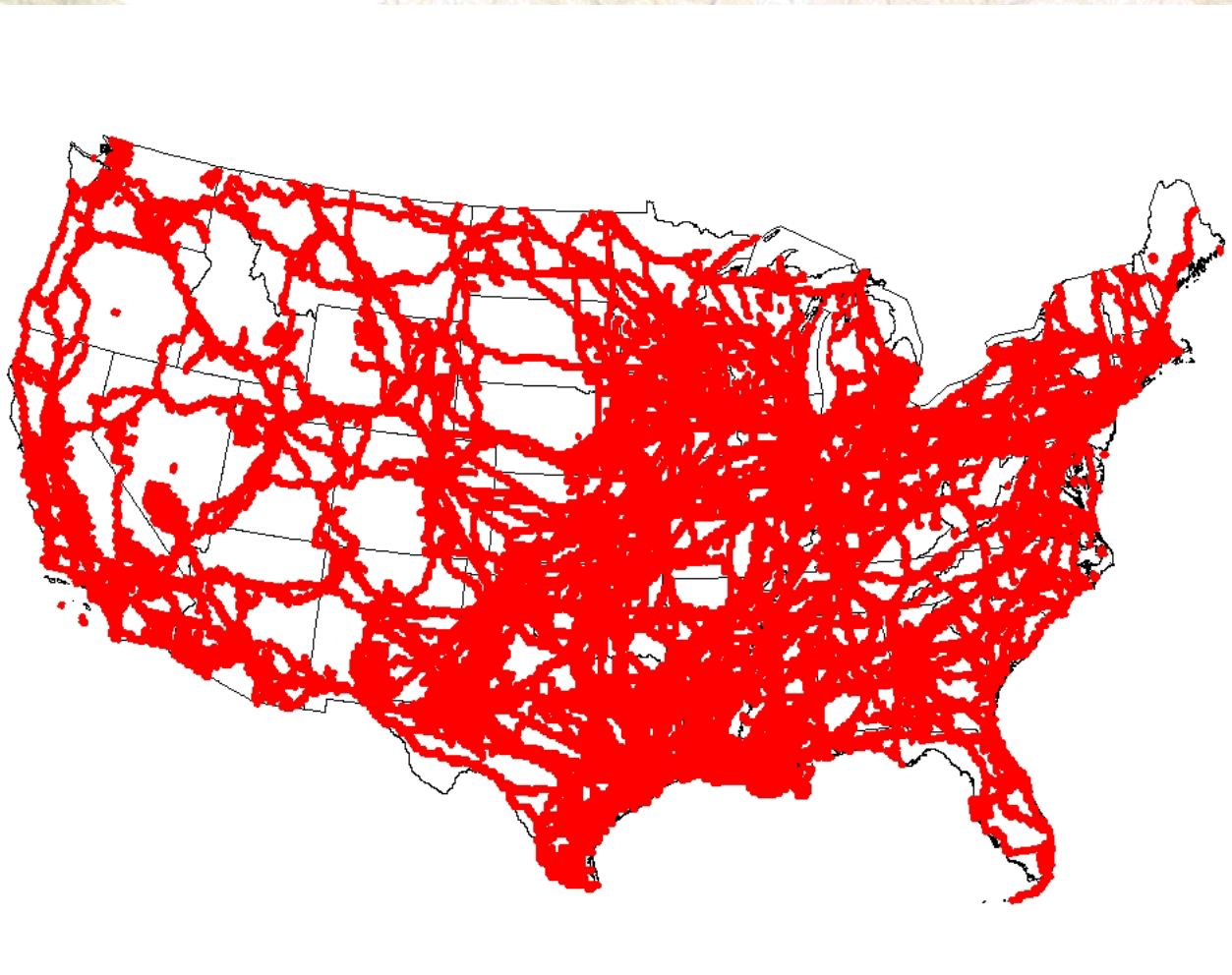
USGS

Pipelines



USGS

Selected Military Bases and Federal Lands



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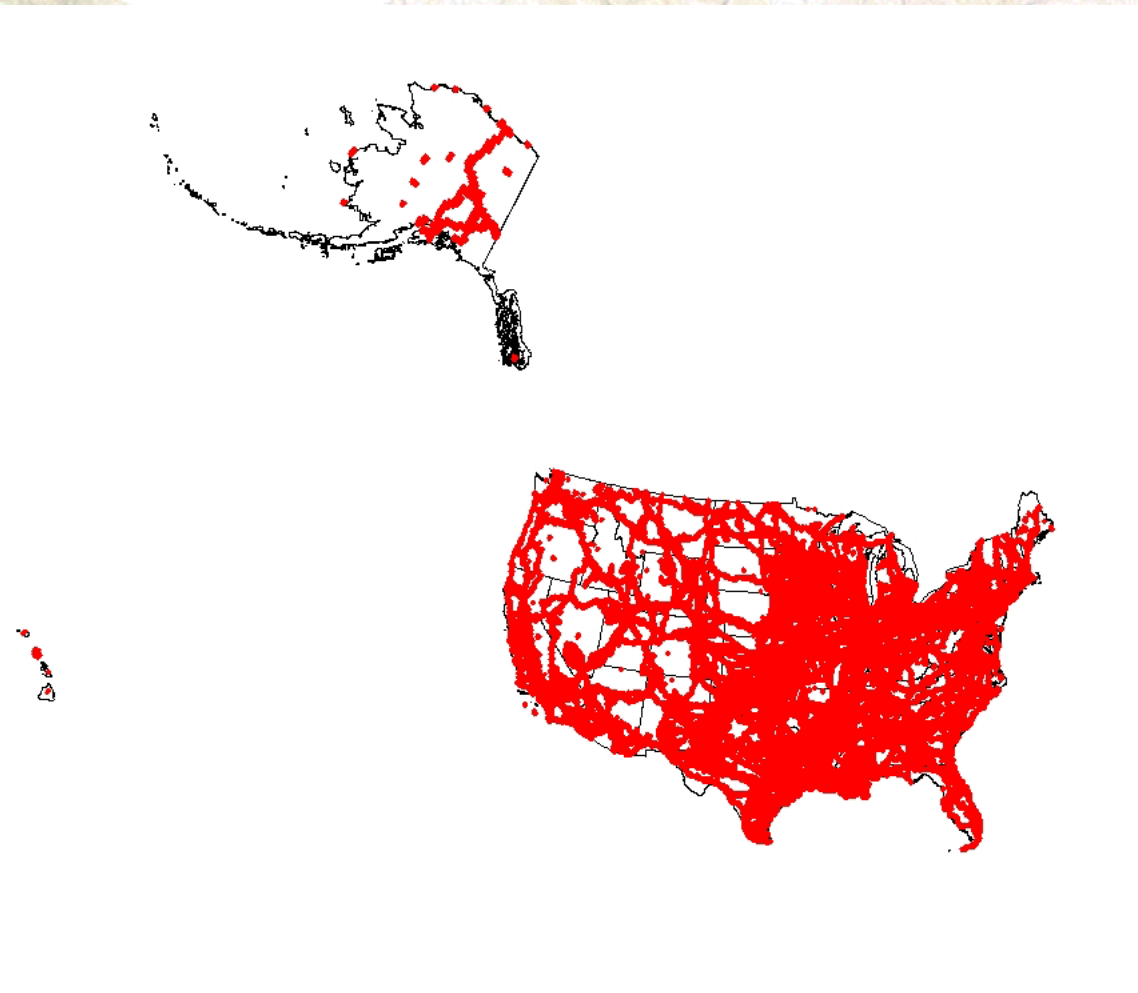
Large Dams, Power Plants, and Airports

USGS

Selected Infrastructure: The 50 States



USGS